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GEOGRAPHICAL READER



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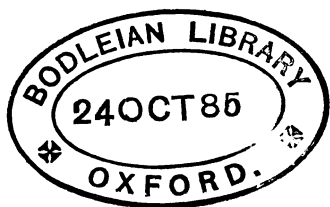
ASIA, AFRICA, AMERICA,  
AND OCEANIA



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# FIFTH

## GEOGRAPHICAL READER.

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### 1.—THE WORLD.—I.

1. **Shape and Size.**—The world on which we live is one of the heavenly bodies called **Planets**, which revolve round the sun, and receive from it the light and heat which are necessary to life. Our earth is a little smaller than the planet Venus, which is often seen shining brightly in our evening sky, and nearly twice as large as the red planet Mars. . . It is not exactly a sphere. It is slightly flattened at the poles, and it bulges out a little at the equator. Hence it is that, of its two diameters, one is longer than the other: the equatorial diameter being 27 miles longer than the polar. A body that is not exactly a sphere is called a **spheroid**; and the earth on which we live is therefore a spheroid. . . Its polar diameter measures 7898 miles; and its largest circumference—that is, the circumference at the equator—measures 24,856 miles.

2. **The Surface of the Earth.**—The area of the globe on which we live amounts to 197 millions of square miles.

Of this amount  $51\frac{1}{2}$  millions are covered by land; and  $145\frac{1}{2}$  by water. There is, therefore, only one square mile of land to three of water; or three acres of water to one acre of land. . . If, again, we look at the two hemispheres—the northern and the southern—we shall find that the Northern Hemisphere contains 38 millions of square miles of land to  $60\frac{1}{2}$  of water; while the Southern Hemisphere has only  $13\frac{1}{2}$  millions of square miles of land to 85 of water. We see from this that the large masses of land lie almost entirely in the Northern Hemisphere. If we take Antipodes Island as a centre, and draw a circle round half the globe, we shall find that we have marked out a **Water Hemisphere**; if we take Falmouth as a centre, and draw a circle round half the globe, we shall find that we have described a **Land Hemisphere**. Hence we may say, speaking broadly, that Great Britain stands at the centre of all the land in the world, and New Zealand at the centre of all the water.

**3. The Continents.**—The land on the surface of the globe is generally divided into six continents—three in the Old World, or Eastern Hemisphere, and two in the New World, or Western Hemisphere. Lying outside and away from these masses of land is “the island continent” of Australia. The continents in the Old World are Asia, Africa, and Europe; in the New World, North America and South America. Of all the continents on the globe, Asia is the largest, and Australia the smallest. Asia is nearly five times larger than Europe; and North America is more than twice as large. Africa is nearly three times as large as Europe, and about four times as large as Australia. South America is not quite double the size of Europe.

**4. The Shapes of the Continents.**—Africa is the most

simple in form of all the continents. Europe, on the contrary, is the most varied in its outline. While Africa is a compact mass, Europe is broken up on the north, the south, and the west, and sends out long peninsular limbs into the sea, receiving at the same time long arms of the sea into the land. South America comes next to Africa in simplicity of shape and shortness of coast-line. . . Of all the continents, Europe has by far the longest coast-line in proportion to its size. North America comes next to Europe. Europe has one mile of coast for every 170 square miles of surface; North America, one mile of coast for every 260 square miles. Australia has the shortest coast-line of all; and Africa comes next to Australia in poverty of outline.

**5. The Line of Fracture.**—The land-masses of the world are crowded together around the North Pole. But the separation between each mass of land is worthy of special note. Let us begin at the separation between North America and Asia, which is called Behring Strait. If we take Behring Strait as a centre, and the distance between it and the Strait of Gibraltar as a radius, we shall discover some very remarkable facts. Our circle will not only cut the Strait of Gibraltar, but the Isthmus of Panama; and it will *include* the whole masses of three continents—Europe, Asia, and North America—while it *excludes* the whole of South America, Africa, and Australia.

**6. Great Rivers at Right Angles.**—It is another remarkable fact that, if we look at the two largest rivers of each continent, we shall find that they flow at right angles to each other. Thus, in Europe, we find the Rhine and Danube forming a right angle; in Africa, the Nile and the Congo; in North America, the St

Lawrence and the Mississippi ; and, in South America, the Amazon and the great system of the La Plata. This is also the case in Asia, though the rectangular flow is not so apparent ; for we have the three great rivers of the Siberian Plain flowing to the north, while the two great rivers of China flow to the east.

---

**com-*pac*'**, with its parts very close together.  
**frac'-ture**, break. (From *L. frangere*, to break. Hence also *refract*, *fraction*, etc.)

1. **Planets.** (From *Gr. planētes*, a wanderer.) The planets were called *wandering stars*, to distinguish them from the fixed stars.

2. **Antipodes**, feet to feet. (*Gr. anti*, opposite ; *pous*, *podos*, a foot.)

## 2.—THE WORLD.—II.

1. **The Heights of the Continents.**—How high do the continents stand out above the level of the sea? Some are very high, and some low. The highest of all is Asia, because it possesses the highest and largest table-lands, and the highest mountains. If the whole of the mountains and table-lands of Asia were levelled down and spread over the surface of the whole continent, the mean height of that continent would be 2264 feet. Next to Asia comes South America, which, with the enormous heights of the Andes, gives to the continent a very high mean elevation. Europe is the lowest of all, and its mean height is only 1342 feet. This is due to the fact that Europe has no very high ranges of mountains, and no very extensive table-lands : most of it is plain, and, indeed, low plain.

2. **The Old World and the New.**—There are several striking contrasts between the build and formation of the Old World and the New, which it may be well for us to know. (i) In the first place, the greatest length of the Old World runs from east to west; the greatest length of the New World from north to south. (ii) Where the one world bulges out, the other bends in. Thus Brazil would fit into the Gulf of Guinea, Western Africa into the Gulf of Mexico, and Nova Scotia into the Bay of Biscay. (iii) The line of highest mountains—of greatest elevation—runs in the Old World in the south of the mass, and from south-west to north-east. In the New World this line of greatest elevation runs in the west of the mass, and from north to south. (iv) In the fourth place, the long slopes of the Old World run to the north; in the New World, they run to the east.

3. **The Oceans.**—While the continents are broadest in the north, and taper off to the south, the oceans are broadest in the south, and become narrower and narrower as they go to the north. The largest ocean is the **Pacific**; and its basin could hold all the land in the world. The next largest is the **Atlantic**; and it is remarkable as receiving more fresh water from the rivers of the two worlds than any other ocean on the face of the globe. The Atlantic is also the greatest ship-highway in the world. The **Indian Ocean** is the most stormy ocean in the world, and the circular storms on its waters are terribly dangerous to sailing vessels. The **Arctic Ocean** lies round the North Pole. It is so full of ice-fields and icebergs that it is useless for commerce. But it has been sailed through; and the **North-West Passage**, as it is called, was first made by Captain M'Clure in the year 1850. The **Antarctic Ocean** lies round the South Pole.

Very little is known of it ; but it is believed that a large continent lies within it, and round the South Pole itself.

**4. Plants.**—Just as there is a regular gradation of climates from the equator to the poles, so there is a gradation of vegetation. We find in the tropics the largest amount of vegetation—the largest trees, the largest number of trees, the largest number of different species, the largest leaves, and the most intense power of growth. As we leave the tropics all this decreases, until at length, in the arctic zone, we find the smallest leaves and the smallest plants—such as mosses, lichens, and low bushes. And, just as there is a gradation of plant-life from the equator to the poles, so there is a gradation from the sea-level up to the snow-line on the highest mountains. Thus, in vegetation as in climate, we find a pretty exact correspondence between altitude and latitude. Increase our latitude, and we find pretty much the same series of climates and plant-life as when we increase our altitude.

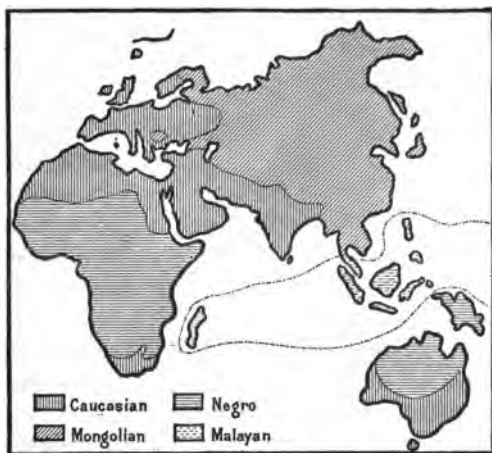
*el-e-va'-tion*, raised height. (From L. *e*, out of; and *levare*, to raise.)  
*cir'-cu-lar*, round. It here means travelling round a centre. (From L. *circus*, a ring; *circulus*, a small

ring.)  
*grad-a'-tion*, arrangement by steps. (From L. *gradus*, a step. Hence also *grade*, *degrade*, etc.)

### 3.—THE WORLD.—III.

**1. Animals.**—Plants are dependent on climate, on heat and moisture ; they cannot move from the spot ; and they mark with considerable plainness the climate of the spot they live in. But animals move to and fro ; and we do not see in them the same gradation from the equator to the poles that we see in plants. But the animal life of

each continent is pretty well marked. Thus Asia, which has a strong, hot, and dry climate, produces the largest and strongest animals—the elephant, the tiger, the lion, the gorilla, and the camel. Africa is the home of hoofed animals, and we find the giraffe, the tallest beast in the world, the zebra, the lion, and such large animals as the rhinoceros and the hippopotamus. The New World, which has a moist climate, has not so strong an animal life as the old. South America is the home of insects



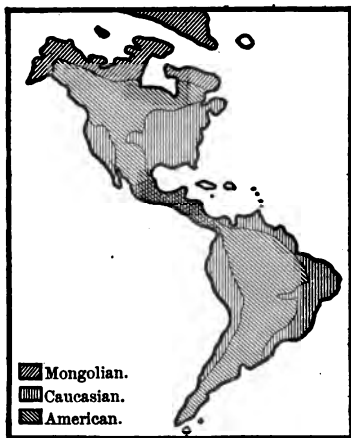
Race Map of Eastern Hemisphere.

and other kinds of animal life that thrive in moist heat. But its quadrupeds are weak creatures compared with the quadrupeds of the Old World. Thus the lion of the Old World is represented in the New by the weak and cowardly puma, the tiger by the jaguar, the elephant by the pig-like tapir, and the stately camel by the lowly llama. The birds of the tropics are remarkable for the brilliance of their plumage; those of the temperate zone



for the beauty of their song, and their feathers, though sober in colour, are still varied; while the birds of the frigid zones have neither beauty of song nor variety of plumage. . . Speaking broadly, we may say that the number of animals, and, in most cases, their power, decreases as we go from the tropics to the frigid zones.

**2. Man, and the Races of Man.**—There are said to be



Race Map of Western Hemisphere.

five great varieties or races of man. These are the **Caucasian** race, which is found in Europe and part of Asia; the **Mongolian**, which is found in the north and east of Asia; the **American**, which is found only in the New World; the **Ethiopian**, which is found only in Africa; and the **Malay**, which inhabits the south-east of

Asia and the great Eastern Archipelago.

**3. The Caucasian Race.**—The **Caucasian** race is the first in the world—first in intellect, first in beauty, and first in power over nature. The men of this race have a light-coloured and often white skin; ruddy cheeks; copious and flowing hair; an oval face; a broad and well-shaped forehead; a high skull; narrow nose; well-shaped eyes, set straight in the head; and mouth of moderate size. We belong to this race.

**4. The Mongolian Race.**—The **Mongolian** race is found chiefly in Asia; but the Turks, Finns, Magyars, and

Lapps of Europe also belong to it. The men of this race have an olive or yellow skin; coarse and lanky hair; no beard; low and square forehead; broad face, with high cheek-bones; small sunken eyes, slanting towards the nose; broad and small nose; and large mouth, with thick lips.

**5. The American Race.**—The skin of the **American race** is reddish or copper-coloured (hence the common name of **Red Indian**); hair black, coarse, and straight; forehead low and retreating; beard very scanty, sometimes none; cheek-bones high; eyes sunk and turned up at the outer angle; nose strong, well-shaped, and aquiline. This is the picture rather of the North American Indian; in South America the features of the race are coarser and more degraded.

**6. The Ethiopian Race.**—The **Ethiopian or Negro race**, which inhabits the larger part of Africa, is distinguished by short, black, crisp, woolly hair; a low and narrow forehead; broad, flat, and fleshy nose, with open nostrils; projecting mouth and jaws; and very thick lips.

**7. The Malay Race.**—The skin of the **Malay** is brown; his hair is very black and crisp; his head narrow; the bones of the face are prominent and well marked; the nose is full and broad. There is a variety of this race which is called the **Papuan**. The Papuan has a skin almost as dark as that of the genuine negro; and what distinguishes him most from the true Malay is the possession of a large crop of high-tufted and very frizzled hair.

---

a'-qui-line, shaped like an eagle's  
beak. (From *L. aquila*, an eagle.)

pro-ject'-ing, standing out.

1. **Rhinoceros**, nose-horn. (From Gr. *rhis*, *rhinos*, a nose; and *keras*, a horn.)

2. **Hippopotamus**, river-horse. (From Gr. *hippos*, a horse; and *potamos*, a river.)

## 4.—CLIMATE.—I.

1. **What Climate is.**—The kind of weather we have throughout the year—the dryness or moisture in the air—the amount of rain and the number of days the rainfall is spread over—the heat or cold in the air,—all these and a number of other things taken together go by the common name of **climate**. The kind of climate a country or district of a country possesses, depends upon a great number of different things.

2. **Latitude.**—The climate we have depends, first of all, on the latitude of the country we live in. Latitude, as we know, means distance from the equator; and distance from the equator fixes to some extent the number of rays we receive from the sun. Thus, if we are living in a country where the sun's rays are **vertical** at 12 o'clock, say in the north of Africa—a larger number of rays will fall upon a certain area of the soil than would fall upon the same area if we lived half-way between the equator and the poles. The slanting rays spread themselves over more than double the space filled by the vertical rays; and it follows that the ground on which the slanting rays fall receives less than half the heat that is poured down on the ground which receives the vertical rays. We can therefore see that, if we increase our **latitude**, we decrease our temperature.

3. **Altitude.**—Let us suppose that we are living in the torrid zone, and at the foot of the Andes. We feel ill and depressed, and long for cooler air. What is the best thing to do? Certainly to ride up the sides of the Andes until we have reached a colder climate. The heat decreases as we ascend; it decreases at the rate of  $1^{\circ}$  for

every 300 feet. Hence, if we go up about 9000 feet, we shall find that, if we had a temperature of  $90^{\circ}$  at the foot of the mountain, we have now only a pleasant temperature of  $60^{\circ}$ . We now see, then, that if we increase our **altitude**, we decrease our temperature. Hence altitude, or elevation above the sea-level, corresponds to latitude, or distance from the equator.

**4. Prevailing Winds.**—A very important element in climate is the nature and direction of the prevailing wind in a place. If the wind blows from a warmer to a colder region, and crosses the sea in its course, it will be a rainy wind. If it blows from a colder to a warmer region, it will probably be a dry wind. The prevailing wind which blows over the British Isles is the south-west wind. It comes from the Atlantic, crosses Ireland, — dropping showers as it goes,—and crosses Great Britain to the north-east. Hence the west coasts of Great Britain are much moister and warmer than the east coasts.

**5. Nearness to Ocean.**—In connection with the prevailing wind, we must also notice the position of a place with reference to the ocean. Places far inland have an excessive climate—a climate of extremes, what is called a **continental** climate. Places near the ocean have a climate which is less severe and more equable,—or what is called an **insular** climate. The greater mildness of the insular climate comes from the fact that water takes in less heat than land—takes it in more slowly, and lets it go more slowly; and that, in consequence, the water of the ocean is in summer cooler than the land, and in winter much warmer. . . Moscow, which is far inland, has a much hotter summer and much colder winter than Paris; and Paris, again, has a more extreme climate than London. Part of a Russian army perished in a march south of the

Sea of Aral, by cold which fell below zero ; and yet the Sea of Aral is in the same latitude as the Azores, which enjoy a perpetual summer.

---

**ver'-ti-cal**, in the top of the sky.

(From *L. vertex*, the top.)

**de-pressed'**, in low spirits.

**tem'-per-a-ture**, heat as measured by

the thermometer.

**e'-qua-ble**, tending or inclining to be quite equal, or to be always the same.

1. Zero, the figure 0. It here indicates the point beyond which Fahrenheit's thermometer does *not* mark the cold

## 5.—CLIMATE.—II.

1. **Ocean-currents.**—There are rivers or currents in the ocean ; and these are either cold or warm. An icy cold current runs down the east coast of North America, and lowers the temperature all along that coast. A warm current—called the **Gulf Stream**—leaves the Gulf of Mexico, crosses the Atlantic Ocean in a north-easterly direction, laves the British Islands and the west coast of Norway in its lukewarm waters, and gives us a mild climate in winter. Labrador lies in the same latitude as the British Isles ; and yet Labrador—owing to the icy current from the north which flows along its shores—has a winter of the severest kind, which lasts nine months.

2. **Rainfall.**—The amount of moisture contained in the air is an important element in climate. In our country there is always a good deal of moisture in the air ; and this moisture often falls in the form of rain. In looking at the question of rain, we must consider two points : (i) how much rain falls ; and (ii) on how many days it rains. The amount of rain and the number of rainy days

are both of importance. . The south-west monsoon brings immense quantities of moisture from the Indian Ocean ; and, when the moisture is condensed in the upper air on the cold sides of the Himalayas, it falls in deluges and waterfalls, rather than showers, upon the valleys and plains. But the number of rainy days in India is not so great as on the west coast of England. The rainiest place on the continent of Europe is Coimbra, in Portugal ; but the number of rainy days there is not so great as at Manchester.

**3. Mountain-chains.**—The position and direction of great mountain-chains is of much importance in considering climate. A mountain-chain often protects a country from cold winds. The chain of the Carpathians rises to the north of the fertile plain of Hungary, and defends it from the piercing north-easters, which blow from the Arctic Ocean. . . The absence of a chain of mountains across the main watershed of North America allows the polar winds to blow over the whole continent ; and a change of wind will sometimes send the temperature—say at Washington—down from summer heat to winter cold in the course of a single hour.

**4. Slope.**—The climate of a country depends to a very great extent on its slope. We all know how much better fruits and flowers grow in a garden which, in our hemisphere, inclines to the south. Such a slope gets most of the sun's rays. We may compare the valley of the Rhine, which looks to the north, with that of the Rhone, which faces the south.

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**Laves, washes.** (From *L. lavâre*, to wash. Hence also *lavender* (= the del'û-gee, floods. washing plant), *laundry*, *laundress*, etc.)

1. **Monsoon**, a season wind—a wind that blows only at certain times.

## 6.—INTERCHANGE OF PRODUCTS.

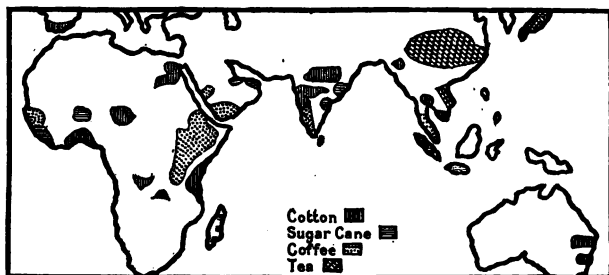
1. **Too Much.**—If we go to the wide and fertile plains of the United States, we shall find that they grow more corn than the American people can eat. If we go to the grassy uplands of Australia, we shall find that more wool is produced than the Australian settlers need for their own cloth and their own coats. What is the American to do with his overplus of corn, and the Australian with his too great quantity of wool? What they do is to exchange their corn and their wool for manufactured goods, which are made in Great Britain, in France, or in Germany. The first condition of commerce or interchange of productions is the existence of **too much** of a thing in this or that country.

2. **Value.**—The second condition of commerce is the condition of **value**. A pound of wool is of more value in England than in Australia; a pocket-knife is of more value in Australia than in England. Thus we see that some things are of greater value in one place than in another. The practical problem then arises: How are we to take our goods to the places where they will be of the **greatest value**? This opens the new question of **carriage**.

3. **Shipping.**—It is found that the cheapest way of **carrying** goods is by water. The highway—which is the sea—costs nothing; and some of the motive power—the wind—costs nothing also. What does cost something is the building of the ship, the wages and the provisions of the sailors who work the ship, and guide her to her haven in a far-off country. The largest number of ships for carrying goods is possessed by Great Britain.

4. **Raw Materials and Manufactures.**—The inter-

change of raw materials for manufactured goods is the chief kind of commerce in which Great Britain is engaged. Other countries and continents have **too much** in the way of wool, raw silk, cotton, corn, coffee, tea, or timber;



The places in the Old World where Cotton, Sugar, Coffee, and Tea are chiefly grown.

we have **too much** in the way of iron manufactures, calico, woollen cloth, and machinery—that is, we make far more things than our own people need to buy. Why is this?

It is because we have under our soil an immense store-house of power, which is called **coal**; and also because we have large supplies of **iron** from our mines. To these we add skill and hard work; and the result is—the greatest manufacturing country in the world. So cheaply can Britain manufacture, that



The places in the New World where Cotton, Sugar, and Coffee are chiefly grown

it frequently happens that she buys the raw materials for her goods in a distant land, brings them across the sea to this island, makes them up into cloth, carries the cloth back to the same distant country, and sells it there at a profit.



**5. Imports.**—What we bring into the country from abroad is called an **import**. Our chief imports are, as has been said, raw materials and provisions. The principal articles we import are six in number. They are corn; raw cotton; wool; sugar; timber; and tea. We spend £60,000,000 a-year on corn and flour; more than £40,000,000 on wool; and about £11,000,000 on tea.

**6. Exports.**—What we carry out of the country to sell abroad is called an **export**. Our principal exports also number six; and we shall see that they are chiefly manufactured goods. They are cotton cloth; woollen cloth; articles made of iron and steel; coals; machinery; and linen manufactures. Of cotton manufactures we sell every year nearly £80,000,000's worth; of iron, both raw and manufactured, we sell yearly to the value of about £30,000,000; and other countries buy from us machinery to the value of nearly £10,000,000. . . A hundred years ago the total value of our annual imports and exports reached only £20,000,000; they are now more than £600,000,000 a-year.

**7. The British Mercantile Navy.**—To carry all these things to and fro across the ocean requires a very great number of very large ships. And Great Britain possesses the largest navy of merchant-ships in the world. She owns nearly 20,000 steam and sailing vessels; and this fleet is manned by nearly 200,000 able seamen.

**8. Our Customers.**—Our best customer is the United States. We sell goods to the people of the United States to the value of about £30,000,000 every year. But we buy very much more from them. Every year we buy from them to the value of more than £100,000,000. Next to the United States as a buyer comes British India; and what we import from her amounts to a little more

than what we send her, the annual value of both being about £30,000,000. From France we buy goods which every year rise to the total of about £40,000,000; but from us she buys not quite to the value of £17,000,000. After these three important customers, come—but still in the first rank—Germany, Australasia, and the Netherlands. In the second rank come Russia, China, Brazil, Belgium, Turkey, and the Cape of Good Hope; and most of these countries sell us very much more than they buy from us.

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**o'-ver-plus**, the *more* that remains over.  
(From L. *plus*, more. Hence also *plural*.)  
**prob'-lem**, something to be solved, or made plain and clear.  
**mo'-tive**, that which gives motion.

**Im'-port**, that which is carried into.  
(From L. *in*, into; and *portâre*, to carry. *In* becomes *im* before a lip-letter, like *p* or *b*. Thus we have *impress*, *impel*, *imbue*, etc.)

1. **Navy**, a number of ships. The fleet of *war-ships* belonging to Britain is called the Royal Navy.

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## ASIA.

### 7.—GENERAL VIEW.

1. **Asia, the Largest Continent.**—Asia is the largest of all the continents on the face of the globe. It contains more than a third part of all the land on the surface of the earth, and more than one-half of the land in the Eastern Hemisphere. It has within itself a greater variety of climates and productions, of races and languages, than any other continent. Asia stretches from the frozen waters of the Arctic to the bright-blue billows of the

Indian Ocean, and from the many-islanded *Ægean* on the south-west, to the snow-clad mountains of Kamtchatka on the north-east. Its northern shores are almost unvisited by ships; its southern coasts are the scene of the



Map of Asia.

busy commerce of many races, peoples, and nations. It very nearly touches North America on the east, and it is joined to Africa on the west.

**2. Asia, the Continent of Extremes.**—Asia contains the highest mountains and the greatest mountain-ranges

in the world. It contains also the highest and most extensive table-lands, and, at the same time, the lowest land that is anywhere to be found on the surface of the globe. Thus, on the one hand, the highest peaks are to be found within its limits, and, on the other, the lowest-sunk basins. It has the hottest climate and the coldest climate. It gives birth to the largest animals, and produces the largest (though not the highest) trees, and the largest plants. In every sense, then, it may be called the continent of extremes.

**3. Points of Likeness to Europe.**—If we compare Asia with Europe, we shall find numerous points of likeness. In the **first** place, both continents thrust out into the sea many peninsulas, most of which run to the south. Thus we may compare the position of Arabia with that of Spain, the situation of Hindostan with that of Italy, and that of Greece with Further India. In the **second** place, the chief clusters of islands belonging to each continent lie to the east and south-east of them. Thus the large clusters of islands to the east and south-east of Asia remind us of the crowded archipelago of the *Ægean*; while Asia Minor is thrust out from the central mass in much the same way as Brittany in the west of France. In the **third** place, the high lands of both continents lie in the south, and their low lands in the north. In the **fourth** place, three of the most famous rivers of each continent rise very near each other. In Europe, the chief sources of the Rhine, the Rhone, and the Danube, are only a few miles distant. In Asia, the sources of the Indus, the Ganges, and the Brahmapootra, lie very close to each other among the snow-clad peaks of the Himalayas.

**4. Points of Unlikeness to Europe.**—If, again, we

contrast Asia with Europe, we shall find many points of unlikeness. In the **first** place, Asia is much *larger* than Europe; it is more than five times as large. It is indeed larger than Europe and Africa taken together. In the **second** place, it is much *higher* than Europe. That is to say, it possesses a great many more table-lands; and these table-lands are much higher and larger than those we find in the smaller continent. Indeed, Asia is the **Continent of Table-lands**. In the **third** place, Asia has a trunk which is much larger than the trunk of Europe in proportion to its limbs. The peninsulas of Asia form only one-fifth of its whole bulk; those of Europe form one-third. In the **fourth** place, it has vast mountain-chains which dwarf the mighty Alps and the broad chain of the Pyrenees into something like insignificance. In the **last** place, there is in Asia a vast district, the rivers of which—and they are large rivers—never reach the sea; in the case of Europe, there is not a single river, however small (with the exception of the Volga), the waters of which do not flow into the ocean.

**5. Boundaries.**—Asia, the greatest continent in the world, is bounded on the **east** by the **Pacific Ocean**, which is the greatest sea upon the globe. On the **south** its shores are washed by the waves of the **Indian Ocean**,—a broad belt of water which stretches from the coast of Africa to the great cluster of islands which are known as the Eastern Archipelago. On the **west** its boundary-line is extremely irregular, and consists of a line of seas, straits, and mountains of the most varied kind. This line runs along the Red Sea, the Isthmus of Suez, the **Ægean Sea**, the Dardanelles, the Sea of Marmora, the Bosphorus, the Black Sea, the Caucasus Mountains, the Caspian Sea, the Ural River and the Ural Mountains:

—so various and so broken is the western boundary of Asia. On the north it is bounded by the frozen waters of the **Arctic Ocean**,—a silent sea, which is hardly ever visited by a solitary sail, the waters of which are seldom furrowed even by the keel of a hunter's or a fisherman's little boat.

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<p><b>in-sig-nif-i-cance</b>, littleness; not deserving of notice. (L. <i>in</i>, not; and <i>significans</i>—from <i>signum</i>, a sign, and</p>	<p><i>facere</i>, to make.) <b>sol'i-tar-y</b>, lonely; single. (L. <i>solus</i>, alone.)</p>
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1. **Archipelago** means the *chief sea*. (Gr. *archos*, chief; *pelagos*, a sea.) This was originally the *Ægean Sea*—to the east of Greece—which is thickly studded with islands. Any sea with many islands is now called an *archipelago*.

2. **Dardanelles**, called so from a Greek town, Dardānus, which stood on the shores of the Strait.

## 8.—SIZE, SHAPE, AND COAST-LINE.

1. **Size**.—The greatest length of this vast continent runs from west to east, and amounts to 6700 miles. Its greatest breadth from north to south measures 5400 miles. Its area amounts to the enormous total of nearly 17½ millions of square miles.

2. **Extreme Points**.—The extreme length of Asia is measured on a line which stretches from the **Suez Canal**—which may be said to divide Asia from Africa—to **East Cape**, upon Behring Strait—a narrow belt of sea which separates Asia from North America. The extreme north and south points, between which the line of greatest breadth lies, are **North-East Cape**, in the far frozen north of Siberia, and **Cape Romania**, which runs out into the sunny seas that bathe the peninsula of Malacca, and which almost touches the equator.

3. **Comparisons**.—The area of Asia is nearly five times

as great as that of Europe ; and it contains a third of all the land upon the surface of the globe. It is larger than the whole of the New World—that is, than North America and South America taken together.

**4. Shape.**—If we cut off the peninsulas which run out from its eastern and its southern coasts, we shall find that the shape of the whole continent of Asia is somewhat like a vast irregular oblong. The chief mass is very compact, and is not indented—as the larger part of Europe is—by seas which run deep into the land.

**5. Coast-line.**—The coast-line of Asia is very long, as compared with the coast-lines of South America and Africa ; but very short, if we compare it with the coast-line of Europe. The continent of Europe sends out long arms into the ocean, and is penetrated by seas that run deep into the heart of the mainland ; and thus it possesses a coast-line which is rich in bends, curves, indentations of all kinds, and noble harbours. Europe has a coast-line of nearly 20,000 miles in extent. But Asia, which is about five times as large as Europe, has a coast-line of only 35,000 miles in length. Thus Europe, in proportion to its size, possesses a coast-line which is about three times as long as that of Asia. The large peninsulas that run out from Europe occupy about one-third of its whole bulk. The peninsulas which project from Asia are small in comparison, though very large in themselves ; they occupy one-fifth of the whole mass of the continent. But, when we come to North America, we find that the peninsulas fill only one-fourteenth of the whole mass of that continent ; while in the case of South America and Africa, there are hardly any peninsulas worth mentioning. Europe is like a tree with a small trunk and enormous branches ; Asia, like a tree with an enormous trunk and

moderate branches; North America has a very large trunk and extremely small branches; while the others can hardly be said to have any limbs at all.

**6. Inland Seas and Bays.**—The eastern and the southern shores of Asia are very rich in large openings or bays, most of which may be regarded as inland seas. These may be compared with the seas—such as the Baltic and the North Sea—on the opposite or western side of the Old World. Beginning from the north, we find the **Sea of Kamtschatka**, between Asia and America; the **Sea of Okhotsk**, in the east of Siberia; the **Sea of Japan**, within the striking range of the Japanese islands; the **Yellow Sea**, into which the Yellow River (or Hoang-Ho) pours its muddy waters; the **Gulf of Tonquin**, on the south of the empire of China; the **Chinese Sea**, shut in by the Philippine Islands; and, south of Further India, the wide opening called the **Gulf of Siam**. On the south of the whole continent of Asia we meet with vaster openings. Thus the **Bay of Bengal** is itself a sea much larger than the German Ocean; the **Arabian Sea** is a wide breadth of waters which wash the shores of India, Beloochistan, and Arabia; while the deep opening of the **Persian Gulf** runs far into the western part of the continent. The **Red Sea**, lastly, is a long, shallow trough, which separates Africa from the rocky table-land of Arabia.


**7. Islands.**—Asia is extremely rich in islands—much richer even than Europe. The whole east coast is fringed with a belt of the most fertile and beautiful islands on the face of the globe; and these islands become more and more varied as we approach the south, until at length we sail into the middle of the richest group in the world, which goes by the name of the **East**



**India Islands** or the **Eastern Archipelago**. Again, on the south, and lying in the Bay of Bengal, we find the **Andaman Islands**, and, south of India, the wealthy island of **Ceylon**; while, sailing further west into the Arabian Sea, we pass such groups as the **Maldives** and the **Laccadives**. The islands on the north coast, in the Arctic Ocean, are poor and unimportant — **Nova Zembla**, a region of perpetual ice and snow, being the best known. On the west coast, in the Mediterranean, we find the rich and beautiful island of **Cyprus**, which not long ago passed into the keeping of Britain.

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<b>in-dent'-ed</b> , broken up; cut into the shape of teeth. (L. <i>dens</i> , a tooth.)	<i>trāre</i> , to pierce.)
<b>pen-e-trat'-ed</b> , pierced into. (L. <i>pene-</i>	<b>e-nor'-mous</b> , very large; beyond all rule. (L. <i>e</i> , beyond; <i>norma</i> , a rule.)
<b>mod'-er-ate</b> , middling-sized.	

1. **Oblong**, a right-angled figure having two longer and two shorter sides; as 

2. **Arctic** means belonging to the bear. (L. *arctus*, a bear.) It is the land or sea which lies under the Great Bear, a large constellation in the northern sky.

## 9.—THE BUILD OF ASIA.

1. **The Continent of Table-lands**.—**Asia** is the continent of great mountains and high table-lands. North and South America are the continents of great plains; Europe and Australia of low lands; Africa and Asia of lofty table-lands. Asia, indeed, possesses the highest and largest table-land in the world, the southern part of which is called the **Table-land of Tibet**; and the northern the **Table-land of Gobi** or **Shamo**. But, indeed, from the far south-west of Asia to the extreme north-east, there runs a broad belt of table-lands which raises the average

height of the continent to a very high degree. In fact, the only low plain in Asia of any great extent is the plain of Siberia in the north-west.

**2. The Kernel of Asia.**—To understand the build of Asia, we must see with the greatest clearness, and take a firm hold with our minds of one great central fact. This is the fact that the heart, core, or kernel of the whole continent consists of the vast table-lands which have been mentioned on the previous page. These—the table-lands of Tibet and Gobi—the highest and most extensive on the face of the globe, govern and regulate almost all the rest of the continent. Within their borders rise all the greater rivers of Asia; the summer heat which is found over them controls the winds; they regulate the distribution of rain; and they form an almost impassable barrier between the two great races that inhabit the continent—the Mongols on the north, and the Caucasians on the south. Let us fix these great plateaux firmly in our eye and in our minds, and we shall see clearly that all else is either low plain, or outlying and separate table-lands. The highest range of mountains in the world—the Himalaya—buttresses these table-lands on the south; while, on the north and east, lofty snow-clad ranges flank their sides, and keep from them the heavy showers of rain which would otherwise pour into their



centre. The whole mass is shaped like a strongly bent bow.

**3. The High Table-land.**—The kernel of Asia consists of two parts—a high table-land and a low table-land, with a deep hollow between the two. The high table-land is called the **Table-land of Tibet**; and it is buttressed by the lofty Himalayas on the south, and by the scarcely less lofty range of the Kuen-Lun on the north. This table-land has an elevation of from 18,000 to 20,000 feet—that is, it is raised into the air to a height of nearly four miles.

**4. The Low Table-land.**—Beyond the Kuen-Lun lies the vast breadth of the lower table-land. Much of it is a great desert, called the **Desert of Gobi** or **Shamo**. It is only about 4000 feet in height—or not quite a mile—above the level of the sea; and it is flanked on the east and north by very high ranges of mountains. The best known of these are the Khingan Mountains, the Yablonoi, and the Altai. Between these two table-lands lies a hollow or central depression, through which a long river, the Tarim, runs—a river whose waters belong to the continental basin, and never reach the sea.

**5. The Non-Oceanic Basin.**—In addition to keeping a firm hold in our minds of the great table-land which is the kernel of Asia, we must try to get a clear idea of the vast basin which lies in the heart of Asia and Europe, the waters of which never reach the sea. This inland district includes the Caspian, the Sea of Aral, and many lakes, both in the high-lands and in the low-lands of Asia. This inland basin, which has no drainage into the ocean, is so large that it amounts to nearly one-fourth of the whole continent of Asia. It may, however, be regarded as a district which has no part, or very little part, in the general life of the continent.

**6. Slopes and Plains.**—From the great central table-lands of Asia the land slopes slowly northward to the Arctic Ocean. This **northern slope** forms the vast **Siberian Plain**, one of the largest plains on the surface of the globe. It is drained by three mighty rivers. Although it is our usual habit to connect the ideas of coldness and barrenness with the plain of Siberia, yet there are many parts in the south where the land is as fertile and the climate as healthy as in the south of England itself. . . The **eastern slope** of Asia contains the great **Plain of China**, which is probably the most fertile, the best tilled, and the most crowded plain in the world. The **southern slope** comprises the low and fertile **Plain of Hindostan**, which includes the Punjaub and the Valley of the Ganges, and two great peninsulas—one on each side of the Bay of Bengal. The **western slope** consists of low mountain-ranges, and more or less fertile plains, which descend gradually from the mountain-mass of Pamir to the lower barren plains of Russia—the steppes that lie round the Aral and the Caspian.

**7. Outlying Table-lands.**—Lying outside the middle table-land which forms the central mass of Asia, we find a large number of plateaux, more or less lofty, which run from east to west, as far as the Red Sea and the *Ægean*. The first we ought to notice is the table-land of the **Deccan**, which is almost triangular in shape, and which is flanked by three ranges of mountains, the Eastern and the Western Ghauts, and by the Vindhya range on the north. . . Then, stretching westward from the Suliman Mountains, we find the important **Plateau of Iran or Persia**, which reaches a height of from 4000 to 6000 feet above the level of the sea. This great high land goes on into the far west; but is there known as the

table-land of **Armenia** and **Asia Minor**. The mighty range of the Caucasus flanks the table-land of Armenia on the north. Separated from these by the valley of the twin-rivers, the Tigris and Euphrates, is **Arabia**, which is one vast table-land, crossed by ranges of mountains and of hills, and flanked by mountains which lie along the coasts of the Persian Gulf and the Red Sea.

**8. Summary.**—Thus, then, have we surveyed the surface of Asia, and observed the build of the mightiest continent on the face of the globe. Two great central table-lands, with several outlying table-lands and fertile plains in the south, a vast plain in the north and west,—such is the construction of the continent of Asia.

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reg'-u-late, govern; keep within limits.	bar'-ri-er, bar; hindrance.
im-pass'-a-ble, that cannot be passed over.	com-pris'-es, includes.
	grad'-u-al-ly, slowly; step by step. (L. <i>gradus</i> , a step.)

1. **Kernel**, the food part of a nut, inside the shell. In a figurative sense it is here used of the very *heart* or *core* of Asia.

2. A **buttress** is the projecting part of a building which is built to strengthen and support the main building. The Himalayas seem to support and wall in this high table-land.

3. **Steppes**, low-lying, grassy plains in the south-east of Europe and west of Asia.

## 10.—MOUNTAIN-RANGES AND MOUNTAIN-PEAKS.

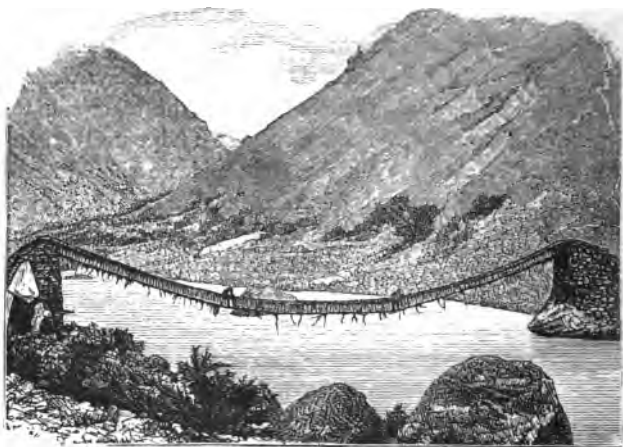
**1. What a Mountain-range is.**—To understand exactly what a range of mountains is, we have only to remember that high mountain-ranges rise from high table-lands; and that we never find a high range rising from low land at the level of the sea. We find no ranges of mountains in Holland, or in the Plain of Russia, or in the valley of

the Mississippi. Indeed it is now a well-known fact that, the higher the table-lands, the higher the mountain-ranges; and, the higher the mountain-ranges, the higher the table-lands. Hence it is that we find in Asia the highest table-land in the world—the table-land of Tibet; and at the same time the highest range of mountains in the world—the range of the Himalayas. Now this range—like the other great ranges of Asia—is not a rising mass of land *separate* from Tibet; it is in reality the buttress or raised edge of the Tibetan plateau. It may be compared to the outside edge of the crust of a pie. We cannot climb up the south side of the Himalayas, cross the crest or ridge, and then descend on the other side to the level from which we came. We find ourselves, on the contrary, at a very high level; and we should have to travel many hundreds of miles northwards before we reached the old level from which we started. When we have surveyed the different mountain-ranges of Asia, we shall find that they are in many instances buttresses that flank high table-lands, or ranges that rise very little above the table-land from which they spring, though their total height above the sea-level makes us fancy them lofty, sky-piercing, and of gigantic height.

**2. The Himalayas.**—(i) The greatest and most important range of mountains in the continent of Asia is the mighty mass of the **Himalayas**. The name of this range is singularly appropriate, for it means "**The Abode of Snow.**" This lofty granite range sweeps from the mountain-knot of Pamir to the gorge of the river Brahmapootra, a distance of 1500 miles—nearly as far, in fact, as from London to Constantinople. The mean elevation of this range is from three to three and a half miles above the level of the sea. There are within its limits forty-five peaks

which rise to the height of 23,000 feet, and four of these reach the enormous height of 27,000 feet. The highest peak in the whole range, as it is also the highest point on the surface of the globe, is **Mount Everest**, which is 29,002 feet, or almost exactly five and a half miles above the level of the sea.

**3. The Himalayas.**—(ii) The interior valleys are blocked with immense glaciers, compared with which the glaciers of the Alps are but petty icicles. Deep gorges cut the



A Jhūla or Twig Bridge across the Chandra River, Himalayas.

ranges; steep precipices rise up in the path of the traveller; high, long, tapering peaks by the score cleave the cloudless blue of that intense and light-steeped Indian sky. The high table-land to the north of the main range is cold, bleak, and barren; the low plains on the south are rich with the most luxuriant tropical vegetation; and a contrast so great within limits so near is not to be found in any other part of the globe. The

Himalayas give birth to many mighty rivers,—among others, to the three great rivers of India—the Indus, the Ganges, and the Brahmapootra.

4. “**The Roof of the World.**”—North-west from the flowery vale of Kashmere rises the range of the **Bolor Tagh**—a name which means “Cloudy Mountains.” One ridge of this is called **Bam-i-Duniah**, or the “The Roof of the World.” It forms the summit of the watershed between Eastern and Western Asia. In this neighbourhood, and not far from the sources of the five great streams that form the Indus, meet three great mountain-ranges of Asia—the **Hindoo Koosh**, the **Kuen-Lun**, and the **Bolor Tagh**. North of these rises the lower range of the **Thian Shan**, or “Celestial Mountains.” To the north of these again is the broad range of the **Altai**, or “Gold Mountains,” which stretch to the north-east, beyond the basin of Lake Baikal—but under different names, such as the **Yablonoi** and **Stanovoi Mountains**.

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Gorge, a deep and narrow mountain-pass. (L. *gorges*, a throat.) | Mean el-e-va'-tion, average height.

1. Granite, a very hard rock formed of small crystals. There are three kinds—red, black, and grey.

## THE HIMALAYAS.

1. Know'st thou the land where towering cedars rise  
 In graceful majesty to cloudless skies;  
 Where keenest winds from icy summits blow  
 Across the deserts of eternal snow?  
 Know'st thou it not?

Oh there! oh there!

My wearied spirit, let us flee from care!



2. Know'st thou the tent, its cone of snowy drill  
 Pitched on the greensward by the snow-fed rill ;  
 Where whiter peaks than marble rise around,  
 And icy ploughshares pierce the flower-clad ground ?  
 Know'st thou it well ?

Oh there ! oh there !

Where pipes the marmot—fiercely growls the bear !

3. Know'st thou the cliffs above the gorges dread,  
 Where the great yaks with trembling footsteps tread,  
 Beneath the Alp where frolic ibex play,  
 While snow-fields sweep across the perilous way ?  
 Know'st thou it thus ?

Go there ! go there !

Scale cliffs, and granite avalanches dare !

4. Know'st thou the land where man scarce knows decay,  
 So nigh the realms of everlasting day ;  
 Where gleam the splendours of unsullied truth,  
 Where Nature smiles, and blooms eternal youth ?  
 Know'st thou it now ?

Oh there ! oh there !

To breathe the sweetness of that heavenly air !

ANDREW WILSON.

pipes, gives a sharp shrill sound.

in the mountains.

gorge, a gully ; a deep and rocky pass | per'il-ous, full of peril or danger.

un-sul'-lied, unstained.

1. **Cone.** A tent is cone-shaped—that is, round and tapering to a point.
2. **Drill,** a very white kind of canvas used in the covering of tents.
3. **Marmot,** a small animal of the rat kind, about the size of a rabbit. It lives in holes which it digs in the earth.
4. **Ibex,** a kind of mountain-goat.
5. **Avalanche,** a mass of ice or snow falling down from a mountain.

## 11.—RIVERS AND LAKES.—I.

1. **The Twin-Rivers of Asia.**—The chief rivers of Asia have their sources just within the edge of the great high land that forms the kernel of Asia ; and from that central high land they flow north into the Arctic, east into the Pacific, south into the Indian Ocean, and west into the Sea of Aral. One very remarkable point about the rivers of this continent is, that many of the largest go together to the ocean in pairs. Thus we have in the west the **Tigris** and the **Euphrates**, which unite at their mouths and form the river called the **Shat-el-Arab**. The two great rivers of China—the **Hoang-Ho** or Yellow River, and the **Yang-tse-Kiang** or Blue River—rise not far from each other among the mountains of Eastern Tibet ; and though they keep far away from each other in their middle courses, they come nearer and nearer as they approach the sea. Again, the **Brahmapootra** and the **Ganges** have their sources near each other in the Himalayas ; and both keep a nearly parallel course to the Indian Ocean—the one on the north, the other on the south of the mighty mass of the Himalayan range. Last of all, the **Sir Daria** and the **Amoo Daria** may be regarded as twin-streams, that find their course, the one into the north, the other into the south, of the Sea of Aral.

2. **The Rivers of the Northern Plain.**—Siberia possesses the most extensive, and at the same time the least useful, water-system of any country in the Old World. The three great rivers that flow through the vast Siberian low-land are among the largest in Asia. They are the **Obi**, the **Yenisei**, and the **Lena**. The great drawback as regards commerce under which they labour is, that

their heads are turned the wrong way. A great commercial river ought, generally speaking, to flow, in our hemisphere, from north to south,—that is, from a colder region into a warmer; and the best type of such a river is the Mississippi, which runs from north to south, from a cool to a warm climate, traverses many different climates and different soils, and enables the people of subtropical regions to exchange their productions with those of the colder countries. These three great Asiatic streams, on the contrary, flow into ever colder and colder regions; they carry—if they carry anything at all—the rich productions of fertile regions into countries where there is nothing to exchange for them; they flow towards an icy ocean that is darkened by no friendly sail and furrowed by no commercial keel. In addition to this, their mouths are closed by ice for nearly two hundred days in every year—from October to May. But in spite of these drawbacks, the great Siberian rivers are of great value as thoroughfares to the traders and dwellers on the Siberian plain. In summer, they are water-ways for boats and steamers; in winter, they are hard ice-roads for sledges; and summer-steamer and winter-sledge provide for the carriage of goods and the voyaging of travellers.

**3. The Amoor.**—Beginning at the north, the **Amoor** is the first great river we meet with that flows into the Pacific Ocean. It is called the “Black River” by the Mantchoos, from the dark-brown colour of its waters.

**4. The Hoang-Ho.**—Coming south, we reach the **Hoang-Ho**, or Yellow River, which rolls its turbid lemon-coloured waters into the **Hoang-Hai**, or Yellow Sea. The Chinese call it “the trouble of the sons of Han”; and it owes this name to its dangerous, fickle, and uncer-

tain character. It has several times burst its banks, changed its course, flooded enormous tracts of country, buried large towns and populous villages in mud; and altogether it conducts itself like a trouble and a nuisance on the largest scale. In geography it is remarkable as the river in the world, among large rivers, which possesses fewest tributaries. Owing to the swiftness of its current, it is of little use to China as a commercial highway.

5. **The Yang-tse-Kiang.**—The mighty stream called the **Yang-tse-Kiang**, or Blue River, is as much the friend as the Hoang-Ho is the enemy of the Great Plain of China. Its basin occupies nearly one-half of China Proper, and it flows through some of the richest lands in the world—lands rich not only in fertile soil, but in metals of many kinds, in different sorts of minerals, and more especially in coal. It is 2800 miles in length, and the tide runs up 400 miles. It is fed by a very large number of tributaries, some of great size; and, with them, it affords to the crowded and hard-working population of China navigable water-ways—what might be called natural canals—to the amount of 12,000 miles. These streams are everywhere thronged by hundreds of thousands of junks, rafts, boats, and skiffs; and along the banks of the river are moored thousands of boats, on which a floating population of several millions pass their whole lives.

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sub-trop'-i-cal, bordering on the trop-  
ical.  
tur'-bid, troubled and muddy.

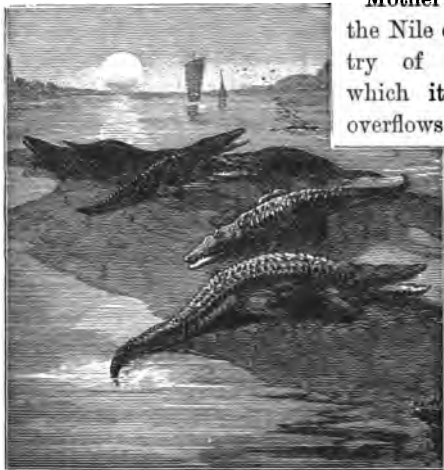
junks, very high-built ships, with  
several decks, used in China.

## 12.—RIVERS AND LAKES.—II.

1. **The Rivers of Farther India.**—The three great rivers of Farther India are the **Mekong**, the **Menam**, and the **Irrawaddy**. The Mekong, or Cambodia, though rich in fish of every sort, is of little use for navigation, except in the lower part of its course; but at its mouth it forms a delta, the land around which is very fertile. This is the delta of Lower Cochin-China, which is now in the possession of the French nation. The Menam, or

“Mother of Waters,” is the Nile of the rich country of Siam, through which it flows; for it overflows its banks once

a-year, and leaves a layer of rich fertilising mud upon the low-lying rice and sugar plains that border it on either bank. The Irrawaddy is the largest of



The Banks of the Ganges.

these three, and, before entering the sea, forms a large delta, on which great quantities of rice are grown.

2. **The Ganges and the Brahmapootra.**—The **Ganges** and the **Brahmapootra** are the great twin-rivers of India. The sources of both are not far from each other in the

Himalayas ; they pursue almost parallel courses—the one on the north, the other on the south of the great Himalayan range ; and after uniting in a delta, which is probably the largest in the world, they empty their waters into the Bay of Bengal. Such is the force of their united streams, and such the amount of mud brought down by them from the higher mountains, that the waters of the bay are discoloured to a distance of sixty miles from the mouths of the delta. . . The chief water-way in the delta is the **Hooghly**, on which the city of Calcutta stands. It is famous for a high tidal-wave, which is called the “bore.” This wave, which is about ten feet high, rushes up the Hooghly with a terrific roar, at the rate of nearly twenty miles an hour.

**3. The Indus.**—The **Indus** is the great river of Western India. Though longer than the Ganges, it does not drain so large a basin ; and hence the Ganges remains the greatest river of India. The Indus rises behind the Himalayan range, not far from the head-waters of the Ganges, and cuts its way by deep gorges into the plain. It has four great tributaries—the Jelum, the Chenab, the Ravee, and the Sutlej. The Sutlej rises on the north of Himalayas, and flows through a gorge 3000 feet deep. These four rivers, with the main stream itself, give the name of **Punjaub**, or “Land of the Five Waters,” to the vast country which lies between them.

**4. The Euphrates and the Tigris.**—The **Euphrates** and **Tigris**—those mighty twin-rivers of Western Asia—flow through a vast plain, which was once the teeming home of millions of people, and the seat of two of the largest cities in the world, Nineveh and Babylon. The plain is now a barren desert ; the mighty cities are heaps of broken bricks ; and the streams themselves are almost

forsaken by ship and boat. The Euphrates rises near Mount Ararat in Armenia, and is everywhere a noble stream. The Tigris, which is called "the arrowy," rises within the great bend of the upper Euphrates, is a very rapid river, and brings down large quantities of mud. Both rivers unite to form the **Shat-el-Arab**, a deep tidal channel which runs through a flat and fertile plain, dotted over with villages, and covered with well-watered meadows and lofty groves of date-palms.

**5. The Tarim.**—The **Tarim** is the most important river within the continental drainage of the great highlands of Asia. It drains nearly the whole of Chinese Turkestan, Western Turkestan, and Kashgaria, and falls into a lake called Lob Nor. This lake is little more than a vast marsh, at a level of more than 2000 feet above the ocean. The waters of the Tarim are used to irrigate and fertilise the country round the cities of Yarkand and Kashgar. The **Amoo Daria** and the **Sir Daria** are two long rivers which flow into the Sea of Aral. They are the largest in the continental basin of Asia, the Amoo being nearly six times as long as the Thames. Both are rapid; but the Russians have placed steamers on them, which carry the local travellers and commerce.

**6. The Lakes of Asia.**—Compared with the other great divisions of the globe, Asia is very deficient in large fresh-water lakes. North America is pre-eminently the continent of great lakes or inland seas of fresh water; while Asia, as we have seen, is the continent of high table-lands. Most of the lakes of Asia are salt, and some of them intensely so. The only sheet of fresh water worth mentioning is **Lake Baikal**, a lake in the shape of a crescent, which lies on the highway between China and Siberia. It discharges its waters through the Angara

into the Yenisei. The intensely salt Dead Sea, the brackish Caspian, the salt Aral, and the bitterly salt Lake Balkhash, are said to be the remnants—the forlorn pools, as it were—of a vast Asiatic Mediterranean which at one time, long long ago, connected the Black Sea with the Arctic Ocean. The saltiest of all the salt lakes in Asia is Tuz-Gol, which is the centre of the interior drainage of Asia Minor. No fish can live in it; no birds cross its waters; and the crusted salt on its banks supplies the wants of the inhabitants of the surrounding districts.

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Ir'-ri-gate, water. (L. *irrigare*, to | Pre-em'-in-ent-ly, beyond all other.  
spread water.)

1. **Delta**, the land enclosed between several branches of a river near its mouth—which branches, with the coast-line, form the triangular Greek letter  $\Delta$  (D), which is called *delta*.

### 13.—CLIMATE AND PRODUCTIONS.

1. **Asia in Three Zones.**—By far the largest part of Asia belongs to the **Temperate Zone**. It is only the southern peninsulas and the islands, that reach into the burning **Torrid Zone**; while only the northern border of Siberia extends into the perpetual frost of the **Frigid Zone**. But, within the vast breadth of land that lies in the temperate zone, there are all kinds of climates to be found, from the burning heat of the tropics at the foot of the Himalayas, to the piercing cold that rules in the highlands of Tibet, or above the snow-line in the higher mountain-ranges.



**2. The Three Chief Climates.**—The great plain of Siberia lies manifestly open to the cold currents of icy wind from the Arctic Ocean. On the other hand, the great high-land barrier of the Himalayas shuts off the heart of the continent from the influence of the warm moist winds that blow from the Bay of Bengal and the Arabian Sea ; while the great southern peninsulas and the islands are open to these warm winds, and also to winds from the Indian Ocean. Hence we find in the continent of Asia three well-marked climates. The first is the climate of Siberia from the Arctic Ocean to the base of the great mountain-ranges. This climate is of a very excessive character ; in other words, it is very hot in summer, in the south at least, and extremely cold in winter. The second is the climate of the Asiatic high-lands, or of the Kernel of Asia. This also is excessive. On the lands within this inner table-land of the continent, we find the greatest heat and the intensest cold—cold sometimes so great that the mercury in the thermometer is frozen. The third is the hot and moist climate of India, Farther India, and the islands. Here cold and winter are unknown ; an eternal summer reigns everywhere ; and there is no division of the seasons—except into dry and rainy.

**3. The Rain-supply.**—(i) The Kernel or inner table-land of Asia may be thought of as a vast rock, which is heated up to a high pitch by the strong rays of the sun during our northern summer. The air above this vast rock becomes heated, hence becomes lighter, and rises high into the sky ; and cold air from all quarters rushes in to supply its place. Now, from the Tropic of Cancer, the north-east trade-winds ought—as they do in other parts of the world—to blow towards the equator during the whole twelve months of the year. But the enormous heat above

the rock-mass of the inner table-land draws them back, and turns them into southern winds for the six months of summer. From the Indian Ocean blows a south-west wind; from the Pacific a south-east.

**4. The Rain - supply.** — (ii) These winds come laden with moisture from the warm seas of the tropics, blow against the Himalayas; their moisture is condensed as they are driven up into the air by the sloping sides of the mountains; it falls in floods on the mountain slopes, and not only gives birth to some of the largest rivers in the world, but nourishes a plant-life of the most luxuriant character. The fall of rain, and with it the wealth of plant-life, is very great in the islands of the Eastern Archipelago. On the high-lands of Assam, the annual rainfall sometimes amounts to 600 inches—that is, to nearly thirty times as much as falls in the drier parts of Great Britain. In fact, about one-half of the annual rainfall over the whole of Asia is taken by its southern edge—by India, Farther India, and the neighbouring islands.

**5. From North to South.**—From the northern shores of Siberia, which lie within twelve degrees of the North Pole, to Cape Romania, which almost touches the equator, there is to be found almost every variety of vegetation. The Tundras grow mosses, lichens, and stunted trees; the tropical regions of India and the Eastern Archipelago produce the most magnificent trees, the richest foliage, and all kinds of aromatic plants. Oaks and heaths are absent from Siberia. Grain cannot be grown north of latitude 62°; and the vegetation becomes richer and richer, and the kinds of plants more and more numerous, as we travel from north to south. In the far south, which has a climate both very moist and very hot, we find growing

wild such plants as the sugar-cane, rice, cotton, cinnamon; the cocoa-nut and sago-palm, and the large tree yielding the milky juice that hardens into gutta-percha. The most useful trees of Asia are the walnut, the cedar, and the teak; the bamboo; the cocoa-nut, the date, and other fruit-trees.

**6. Contrasts.**—The smallest trees bearing the sharpest leaves grow in the far north; the largest trees and with the broadest leaves grow in the islands—such as Sumatra—where there is an enormous amount both of moisture and of heat. While the thin, hard, sharp leaves of the far north give to the pines and firs on which they grow the general name of “needle-wood,” there are to be found in the hot and steaming south, leaves as large as an ordinary dining-table. While the fruits of the north are small berries and hard nuts, the fruits of tropical Sumatra are the finest and largest in the world—oranges, lemons, bread-fruit, pine-apples, and mangosteens.

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ar-o-mat'-ic, giving forth a fine smell. (Gr. *arōma*, a pleasant smell.)

1. **Tropic of Cancer**, the 23½° line of north latitude. At this line the sun's rays are vertical at twelve o'clock on June 22d; and from that date the sun seems to *turn back* (Gr. *tropos*, a turning), and to keep going to the south.

2. **Teak**, a large tree of the oak kind, found only in Asia and Africa.

3. **Mangosteen**, the fruit of a tree which grows in the tropical Pacific islands. It is like the orange in size and shape, and is of a dark-brown colour, spotted with yellow or grey.

#### 14.—PLANTS, ANIMALS, AND PEOPLE.

1. **The Food-plants of Asia.**—In the hot and moist countries of Asia, the staple food—and it is the food of

hundreds of millions of human beings—is rice ; in the hot and dry countries, the staple food is dates. The tea-plant flourishes in China, in Japan, in Annam, and also in Assam ; and it is one of the chief sources of the wealth of the world. Coffee is grown in Arabia, in Ceylon, and on the uplands of Southern India. The sugar-cane flour-



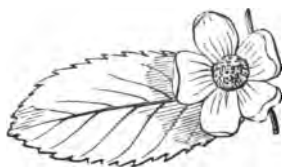
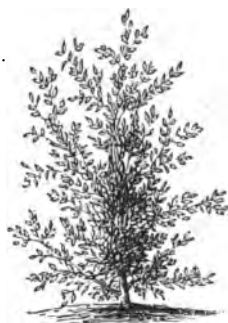
Plant-Map of Asia.

ishes in the two eastern peninsulas ; cinnamon in Annam and Ceylon ; while China produces all kinds of grain—both tropical and sub-tropical—the most aromatic spices and the finest fruits. . . Even on the high altitudes of Asia grains are grown. Corn ripens in Tibet at a height of 18,500 feet above the level of the sea, or nearly  $3\frac{1}{2}$  miles up in the air ; barley in Chinese Tartary at a height of 16,000 feet.

**2. The Fruits Europe owes to Asia.**—It has been said that “Europe is indebted to Asia for all her grains

with the exception of maize ; for all her domestic animals excepting the sheep ; and for all her domestic poultry with the exception of the turkey." This is true. It is to Asia, also, that we owe our best fruits and our fairest flowers. Western Asia is the native land of most of our fruit trees. The vine, the orange, the lemon, the cherry,

the peach, the apricot, the mulberry, the fig, and the plum, all grow wild in that rich region of the world.



Tea-Plant and Leaf.

**3. The Wild Animals of Asia.**—Asia is the home of the largest animals in the world. Large animals thrive best in dry and hot lands ; and the elephant, the tiger, the buffalo, and the bear abound in India and in Farther India. White bears which feed on fish and seals roam the icy north ; the bears of the tropical regions are harmless, and feed on fruits and honey. The tiger is found in almost every part of the

continent, from Armenia in the west to Malacca in the east. But it is in the Sunderbunds—an enormous swamp, covered with jungle, in the delta of the Ganges—that the royal tiger of Bengal is chiefly found ; and this tiger is certainly the king of Asiatic beasts. The lion is seen in Arabia, Persia, and the west ; but is no longer found in India. Tropical Asia abounds in monkeys. The largest is the orang-outang, or "wild man of the woods," an

enormous ape found in the forests of Malacca, Cochin-China, and some of the islands of the south-east.

**4. The Domestic Animals of Asia.**—The high table-land of Central Asia is the native land of the horse and the ass, of the ox and the buffalo, the sheep and the goat. The single-humped or Arabian camel, and the



Travelling in India.

double-humped or Bactrian camel, both belong to Asia. The reindeer is almost the sole wealth and support of the dwellers on the vast plain of Siberia ; while the yak-ox, with its silky coat of long hair, is the chief source of wealth to the people of the high-lands of Tibet. The elephant is tamed in India and the south-east, and is

employed in state processions, in hunting, and in drawing great weights. In the north, the reindeer; in the highlands, the yak-ox; in the deserts, the camel; and in the south, the elephant and the buffalo,—such are the chief beasts of burden, the most useful friends of man, in this vast continent.

**5. The Birds of Asia.**—Asia possesses a greater variety of birds than any other continent. Swans, geese, and ducks of various kinds abound in the cold regions of the north. Albatrosses are very numerous on the ice-bound shores of Kamtchatka; while the well-known song-birds of Europe are heard in the temperate regions of this continent. When we reach the south, and especially the rich spicy islands of the south-east, we are struck by the brilliance of the plumage shown by the larger birds; and it is in this part of Asia that we find in their native state birds of paradise, peacocks, and pheasants.

**6. The Reptiles of Asia.**—The reptiles of Asia are both large and numerous. Their chief haunts are the north of Hindostan, the Eastern Peninsula, the south of China, and the islands of the south-east. The largest reptile is the crocodile of the Ganges; and the helmeted crocodile and double-crested crocodile are found in many large rivers and their estuaries. . . The south of Asia is especially the home of poisonous serpents, and in India alone many thousands of persons are killed every year by the bites of snakes. The most poisonous of these serpents is the cobra-di-capello, or hooded snake. From a singular mark on the back of its neck, which looks like a pair of spectacles, it is sometimes called also the spectacled snake. The people of India not only dread this terrible serpent, they also worship it. If one is found in a house, it is not attacked and driven out, or killed; it is petted, fed,

and tenderly cared for. Indian jugglers or snake-charmers have great power over these serpents ; they carry cobras about with them, wind them round their necks, and make them perform various movements to the sound of the flute, which the serpents seem to love. The python, or Asiatic boa-constrictor, which destroys its prey by winding itself round the body of its victim, and crushing it to death in its powerful folds, is also found in the south and east of Asia. These snakes have no poison-fangs, but have long, sharp teeth, turned inwards ; and with these they seize and hold an animal until they have wound themselves round its body.

**7. The Minerals of Asia.**—The great mining region of Asia is Siberia. In the rocks of that vast and still only half-explored region are found gold, silver, and platinum ; copper and lead ; coal ; and the mineral which is called graphite, but which is better known as black-lead. India sends us diamonds, and possesses many mines of precious stones. China is noted for a very fine kind of clay called kaolin, of which the best porcelain or “ china ” is made ; but the most valuable mineral in that vast country is coal. Sir Richard Temple tells us that China “ harbours supplies of ore and coal sufficient some day to revolutionise the trade of the world.” There is one coal-field that is said to measure 100,000 square miles—that is, about twice the size of England—and a great deal of the coal is of the best and richest quality. . . . The steppes around the Caspian are rich in salt ; and the steamers that ply on that great inland sea make use, instead of coal, of the naphtha that is found in great abundance on the “ fire-fields ” of Baku, a wild and desert region, to which the fire-worshippers of Persia were wont at one time to make pilgrimages.

**8. Population of Asia.**—Asia is the most populous con-



continent on the face of the globe. It is believed to be the cradle of the human race ; and it is still the home of two-thirds of the whole of the human family. But, as in the case of the climate and the vegetation of Asia, the contrasts in regard to population between different parts of the continent are very remarkable. The northern lands and the loftier table-lands of Asia are hardly inhabited at all. The well-watered plains of the Ganges and the two mighty river-plains of China teem with a population which is the densest in the world. . . It is a very remarkable fact that the populousness of Asia varies directly as the rainfall. Where there is a large rainfall, there is a dense population ; where there is little rain, there are few people. It is in the south and east of Asia that we find the most crowded population. The south and east are directly exposed, and their fertile valleys lie wide open to the warm, moist winds from the Indian and the Pacific Oceans. And we find that India, Farther India, China, and Japan, are the most crowded parts of the whole earth. In these countries, in fact, are massed together half of all the human beings on the face of the globe. We know that India alone contains more than 250 millions of souls ; and there is good reason to believe that the "Flowery Land" numbers a population of nearly 400 millions, or almost 100 millions more than live in the whole of Europe.

sta'ple, chief.

jun'gle, low, and generally marshy land, overgrown with bushes, low trees, creepers, and other kinds of

plants.

es'tu-ar-y, the wide mouth of a river, up which the tide goes. (L. *æstus*, a boiling, or tide.)

1. Albatross, a bird of the gull kind, with very wide wings, found chiefly in the Antarctic Ocean.

2. Naphtha, a mineral oil which burns with great freedom. The term used in America for this oil is rock-oil or petroleum. (Gr. *petra*, a rock ; and *oleon*, oil.)

## 15.—INDIA.—I.

**1. What India is.**—The word **India** means the country beyond the river Indus; and this name was first given to it by the Persians. This great country is sometimes also



Map of India.

called **Hindustan**, or the Land of the Hindoos, as Afghanistan is the Land of the Afghans. But the name Hindostan is rightly applied only to the valleys of the Upper Ganges, and the Jumna which flows into it, and is not properly applied to the other parts of this Eastern country.

India is not a colony, but a dependency of the **British Empire**. It was not settled by English immigrants, but seized upon by force of British arms. But, as it is the largest country in that empire, and contains about 250 millions of souls, or about ten times as many as England and Wales, it is justly regarded as our dearest possession,—as “the pearl of the British crown.”

**2 Size.**—The length of India from north to south—from the base of the Kuen-Lun mountains to Cape Comorin—is about 1900 miles; and the breadth from east to west about 1600 miles. The area contains  $1\frac{1}{2}$  million square miles. But these figures give us a very vague and weak idea of the enormous vastness of India. Its area is equal to nearly half that of Europe, and to fifteen times the size of Great Britain. We are so accustomed to look at India in maps on a small scale, that we fail to realise the vastness of its space and the enormous length of its distances. The Himalayas are as far from Cape Comorin as Iceland is from Spain; and were we to try to walk across India from north to south, we should take three months, walking at the rate of twenty miles a-day.

**3. Shape.**—Its shape may be compared to two triangles, one placed upon the top of the other. Part of the southern triangle represents **Peninsular India**; the northern part of the southern triangle, and the whole of the northern triangle, represent **Continental India**. The landward border, and the seaward border, are nearly of the same length—3000 miles; so that India may be regarded as half a maritime, half a continental country.

**4. Boundaries.**—On the north-west we have the **Suliman Mountains**—the edge of the high plateau of Afghanistan. On the north are the **Himalayas**—which form

the steep southern edge of the table-land of Tibet. On the north-east are the mountains of southern **Assam**, which separate the basin of the Brahmapootra from that of the Irrawaddy in Burmah. On the south-west we have the waters of the **Indian Ocean**; and on the south-east the storm-driven billows of the **Bay of Bengal**.

**5. Coast-line and Islands.**—India possesses a long coast-line in proportion to its size. The **Gulf of Cutch** and the **Gulf of Cambay** are the chief openings on the north-west. But much of the eastern or Coromandel coast is straight, unbroken, surf-beaten, and unapproachable. . . The largest island is **Ceylon**, and it is almost the only one of importance. It is of about the same size as Ireland. In shape it is like a pear; in build it consists of a high interior table-land, with a belt of low and fertile land running all round it. Its fine climate, and its rich and varied vegetation, have given it the name of “the jewel of the Eastern seas.” It grows a great deal of coffee, cinnamon, tobacco, and cotton; and the people, who are called **Cinghalese**, number about  $2\frac{1}{2}$  millions. The capital, the seat of government, and the largest town, is **Colombo** (a word which means “the harbour”); and Colombo is nearly as large as Leicester. **Kandy**—a word which means “the hill”—is the old capital, and stands on the mountain table-land in the heart of the country. The island is rich also in precious stones; the forests are rich in ebony, rose, satin woods, and palm-trees; and elephants, bears, hyenas, jackals, and monkeys are very common. But there are no lions or tigers. . . The **Laccadives** (the word means a *hundred thousand*), a cluster of islands formed by coral atolls, and the **Maldives** (the word means a *thousand* isles), a chain of coral islands, lie to the west of the Malabar coast.

<p><b>im'-mi-grants</b>, persons from one country who go <i>into</i> another. (L. <i>in</i>, into; and <i>migrāre</i>, to remove.) The</p>	<p>opposite of <i>immigrant</i> is <i>emigrant</i>. <b>mar'-i-time</b>, relating to the sea. (L. <i>mare</i>, the sea.)</p>
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1. **Colony**, a settlement inhabited by persons who go out from the mother-country.

2. **Dependency**, a country which *depends* on the Crown, but which is not inhabited by settlers from the mother-country.

## 16.—INDIA.—II.

1. **The Build of India.**—A high range of mountains—the highest in the world; low rich plains—drained by two mighty rivers, the Indus and the Ganges; a low table-land in Central India; a high table-land—the Deccan, in Southern India: such is the build of our Indian possession. Or we might say that India consists of four mountain-systems, one vast plain, and one wide plateau. The mountain-systems are those of the **Himalayas**, the **Vindhya**s, the **Western** and the **Eastern Ghauts**. The plain is the **Plain of Hindostan**—the plain of the Indus and Ganges valleys; the plateau is the plateau of **The Deccan**.

2. **The Himalayas.**—This noble range of mountains, hundreds of whose peaks rise above the line of perpetual snow, gives birth, by the melting of its snows, to all the great rivers of India. Its upper valleys are filled with glaciers, compared with which those of Switzerland are very trifling. Even its passes are about 15,000 feet high. Over them it is barely possible for the half-breathless traveller to make his way; and the companies of climbers avail themselves of the aid of yaks and sheep, which carry their provisions, and are themselves afterwards eaten. At the southern base of this great moun-

tain-barrier there runs a strip—from three to fifty miles broad—of pestilential jungle, thick with twining plants and brushwood—the haunt of elephants, tigers, wild boars, jackals, and other wild beasts,—and breathing forth at the hot season of the year so deadly an air that the natives of the neighbouring country dare not even approach it. They call it the “Belt of Death.”

**3. The Great Plains.**—The plain of the Indus differs a good deal in character from that of the Ganges. The Punjab,<sup>1</sup> or Valley of the Five Rivers, is fertile; but south of it lies the **Great Desert**, which fills one-tenth of the area of India. Still farther south, we come to a strange amphibious region, called the **Runn of Cutch**. During the rainy season it is a lake; during the dry season it is a salt, sandy plain, with so few landmarks, that travellers, and even caravans, are sometimes lost in it. When first the waters retire into the gulf, the stench from stranded fish and prawns is so strong that no horse will face it. This desert is a little larger than Yorkshire. . . The Valley of the Ganges is a wide and very fertile strip of country; it is indeed one of the richest and most crowded alluvial plains in the world.

**4. The Low Table-lands.**—Between the Aravulli Hills and the Vindhya Mountains lie two low table-lands, which extend over the country generally called Central India.

**5. The High Table-land.**—South from the Vindhya Mountains stretches the high triangular table-land which goes by the name of **The Deccan**. It has a gradual eastward slope, as we can see by the flow of the rivers, and contains many rolling treeless plains, with here and

<sup>1</sup> **Punj** means *five*; and **ab** means *river*. We have *purj* in *punch*, a liquor said to consist of five elements; and we have *ab* in *Av-on*. So also **Deccab**, the country of the *Two Rivers*—the Jumna and the Ganges.

there mountain-ridges and high flat-topped hills, often crowned with fortresses. This table-land is supported by two buttresses—the **Western Ghauts** and the **Eastern Ghauts**. The Western Ghauts are a noble range, about 300 miles in length, clothed with magnificent teak-forests, their grand and rugged outline—here and there broken by steep granite peaks—forming a splendid frame and background to the view from the Indian Ocean. The highest part of the range rises to the height of 7000 feet. The Eastern Ghauts are much lower, and have many wide openings into the interior, through which the great rivers find their way to the waters of the Bay of Bengal. These two ranges meet in the **Neilgherries**, or Blue Mountains—a lofty range with several peaks, which rise above 8000 feet. The highest is **Dodabetta**, or Great Hill, which has an elevation of 8760 feet—the greatest height reached by any mountain in India south of the mighty Himalayas.

6. **The Rivers of Continental India.**—The two great continental or mainland rivers of India are the **Indus** and the **Ganges**. The Indus is navigable to Attock, 950 miles from its mouth, where it receives the river Kabul from the high-lands of Afghanistan. . . The Ganges is the highway of the great alluvial plain of Hindostan; and 300,000 boatmen ply upon its waters and those of its tributaries. It is navigable, by the aid of canals, to Hardwar, which is 1300 miles from its mouth. Its greatest tributary is the **Jumna**; and the strip of country between the two is called the **Dooab**. During the melting of the snows, from June to September, the Ganges rises to four times its usual volume; and the embanked villages in Lower Bengal look like islets in the waste of waters, which are dotted with craft of every sort, speeding hither and thither among the water-isolated habitations. To the Hindoos

the Ganges is a sacred stream ; and devotees come from all parts of India to certain parts of the river, to pray, to worship, and to wash in its holy waters.



Map of Basin of the Ganges.

**7. The Rivers of Peninsular India.**—The short streams which flow down the west sides of the Western Ghats are little more than mountain-torrents,—so rapid as to be useless for navigation. During the period of the south-west monsoons these rivers are much flooded. . . The streams that rise on the east side of the Western Ghats have large and long basins, plenty of room to gather in other streams, to develop themselves, and to be useful to the inhabitants of the Deccan and of the eastern plains. The greatest of the Deccan rivers is the **Godavery**, which is rather more than four times the length of our own Thames. In its course through the plain it is dotted with numerous islands, many of which are crowned with grotesque and fantastic Hindoo temples. In the lower part of its course it flows through a highly cultivated country, and its water is very largely used for the purpose of irrigation. . . The **Nerbudda**, which is fed from the Vindhya Hills, and the **Kistna**, in



the south of the Deccan, are both sacred streams, which daily witness the sight of the dead and dying, brought down to their waters that the poor pious Hindoo may be carried on their current to the home of his heavenly Paradise.

**i'-so-lat-ed**, shut off from communication with each other. (L. *solus*, alone.)

**dev'-o-tee**, one who worships blindly but devotedly.  
**gro-tesque**, oddly shaped.

1. **Alluvial plain**, a plain the soil of which is formed by the offscourings of the mountains and higher grounds brought down by the rivers.

2. **Monsoons**, winds which blow steadily in one direction for a certain part of the year. In India they take the place of the trade-winds.

### 17.—INDIA.—III.

1. **Climate**.—The Tropic of Cancer runs nearly through the middle of India; and hence we should expect to find the general character of the climate to be tropical. Great heat, heavy rains, only two seasons—the wet and the dry,—such, broadly speaking, is the climate of India. But the dry season may again be subdivided into two—the hot and the cold. The hot season lasts from March till June; and the heat often rises to more than 100° in the shade. The great fan, called the *punkah*, must be kept going day and night without ceasing, or the intolerable heat would be fatal to Europeans. The rainy season begins with the coming of the monsoons, and lasts from June to October. The cool season corresponds to our winter, and lasts from October to the end of February. The rivers of India are fullest during the blowing of the monsoons, because these winds bring great masses of clouds heavily laden with moisture from the Indian Ocean, which, on being condensed by the cooler air at the tops of the

Himalayas, and other mountain-ranges, falls in heavy torrents of rain. In the peninsula, the rains are heaviest on the Malabar or western coast; and in the south of the Deccan, eight rainy months are reckoned in the year. The Malabar coast has sometimes an annual fall of about 500 inches of rain; but in the caldron-like Assam valley 600 inches in a year have been known to be poured upon the ground. On the Coromandel or eastern coast the case is very different—the heat is so great as to destroy vegetation; and in the hot season every green thing is burnt up.

**2. Vegetation.**—The great staples of food and commerce in India are rice, jute, indigo, and the poppy from which opium is made. All these are distinctly tropical growths; and most of the vegetation of the Indian plains and valleys is tropical. "It is worthy of note," says Sir R. Temple, "that the vegetable products of India are, on the whole, inferior in quality to those of other countries. The cotton, sugar, tobacco, and rice are all surpassed by those of America; while the maize, wheat, wine, fruits, and vegetables cannot be compared with those of Europe." But the indigo, jute, and opium of Bengal are excellent; while the tea and coffee of Ceylon, the Neilgherries, and Assam are unsurpassed, and in some cases unapproached, in



The Poppy-Plant from which Opium is obtained.

flavour. . . The fertility of the plains is due to the new soil brought down every year by the rivers—due to the fact that “thousands of square miles annually receive a top-dressing of virgin soil, brought, free of expense, a quarter of a year’s journey from the Himalayas.”



Banana Fruit-Tree.

### 3. The Forests. —

The forests of India cover an area of more than twice the size of Scotland. In the lower lands the sal and the bamboo grow abundantly, especially along the southern base of the Himalayas; while higher up are immense forests of those trees that grow best in the temperate zone. Such are the chestnut, the walnut, the maple, the oak, the hard and enduring teak, and the graceful deodāra. Near every village is found the banyan or Indian

fig, its branches—like an overcrowded city—the abode of countless birds, bats, and monkeys. In most parts of India we find also the banana and the date-palm; and, on the coast of Malabar, the bread-fruit tree.

4. **Animals.**—The forests and jungles of India are

tenanted by vast numbers of wild animals, birds, and reptiles. It is calculated that about 20,000 human beings and 50,000 head of cattle are every year destroyed by wild beasts and poisonous snakes. The elephant, the rhinoceros, the buffalo, the tiger, with bears, wolves, wild boars, and monkeys, inhabit the jungles; while the lion is found chiefly in the north-west. The camel or the dromedary belongs to the dry region of the north-west; the yak inhabits the heights of the Himalayas; and the humped ox is the patient servant of man in the hot plains. Crocodiles—the harmless “sharp-nosed” and the dangerous “snub-nosed”—infest the tanks which have been built for the storage of water, and the river-channels, while crowds of sharks lie in wait at their mouths. Serpents of every size are very numerous; but the most dreaded snake is that known as “the hooded snake,” or cobra-di-capello.

**5. Minerals.**—All the best known metals and minerals are found in India—but not in large quantity, with the exception of iron. Coal is mined in many parts. Gold is found in Mysore, in the south of the Deccan, and in the beds of many streams. Salt, which is largely prized in hot countries, is obtained from mines in the north-west of the Punjaub, and by evaporation from the coast-lagoons which exist all round India, and especially on the eastern shores of the peninsula. In addition to these metals and minerals, India has been famed for thousands of years for its diamonds, rubies, sapphires, and emeralds.

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**in-tol'-er-a-ble**, that cannot be borne; unbearable.  
**con-densed'**, made to occupy less space. Here it means to become

changed into water.  
**in-fest'**, abound greatly, so as to cause annoyance.

1. **Assam**, a province to the north-east of the presidency of Bengal. It occupies part of the valley between the mountains in the north-west of Farther India and the eastern end of the Himalayas.

2. **Deodāra**, the Himalayan pine. It sometimes grows to a very great height.

## 18.—INDIA.—IV.

1. **Peoples.**—There are few countries in the world that contain a greater diversity of tribes and races in every degree of civilisation,—from the thoughtful and philosophic Hindoo down to the most degraded savage,—and so great a variety of languages, as India. The two chief stocks are the Hindoo, in the northern plains; and the Dravidian, in the Deccan. The Bengalee, or Hindoo of Bengal, though high in intellectual and artistic rank, is weak and cringing; the Sikhs, in the Punjaub, are the best cavalry soldiers in Asia; the Mahrattas, in the north-west of the Deccan, are brave and hard-working men; the Gonds are barbarians, armed with bows and arrows, and not much superior in advancement to the African negro.

2. **The Government of India.**—The larger part of India was, previous to the year 1858, ruled by the servants of the East India Company. On the 1st of September 1858, the power of the East India Company was brought to an end; and the Queen of England took upon herself supreme power and sovereign rule in India. The chief administrator of Indian affairs in England is the **Secretary of State for India**, who sits, or may sit, either in the House of Peers or in the House of Commons. The chief ruler in India is the **Governor-General**, who rules in the name of the Queen. On the 1st of January 1877, India was constituted an empire; and Queen Victoria was created Empress of India, or **Kaiser-i-Hind**.

**3. Political Divisions.**—By far the larger part of India is under British rule; but there are also many native States—some independent, and some tributary to Britain. There were, under the old rule, three great Presidencies—**Bengal, Madras, and Bombay.** But Bengal is now divided into many provinces, the largest of which are Lower Bengal, the North-West Provinces, the Punjab, and the Central Provinces. . . There are more than four hundred native States; the reigning prince is generally called **Rajah** (or King), and, in the larger States, **Maharajah**—that is, Great King (or Emperor).

**4. Industries.**—Agriculture is in India the chief industry. The most extensive crop is rice; and there are two harvests—one in August, and another in December. There are also two crops of wheat, barley, and maize. Cotton is grown in almost all parts of India; jute is very largely cultivated; and silk is an important product of the valley of the Ganges. . . The textile manufactures—shawls, silks, and carpets—of India have been famous for centuries; but many of them have declined before the cheaper and inferior products of the great factories in Britain. But the ivory carvings of Delhi; the jewellery and filigrees of Calcutta and other large towns; and the gold and silver embroideries of Benares,—are still celebrated in all parts of the civilised world.

**5. Commerce.**—The internal trade of India—the trade of south with north, west with east, and province with province—is very large; and it is growing with the growth of the railway system, which now amounts to nearly 10,000 miles. Great Britain buys from India raw produce and goods—cotton, jute, rice, tea, and other things—to the amount of £32,000,000 sterling. On the other hand, we sell her manufactures to the amount of nearly

£30,000,000. . . Next to Britain, the country possessing the largest trade with India is China, which buys from her enormous quantities of opium—grown in the fertile plains of Bengal.

di-ver'-si-ty, variety.

in-tel-lec'-tu-al, belonging to the intellect or mind.

ad-min'-is-tra-tor, one who looks after affairs of state. (L. *ministrare*, to

serve.)

trib'-u-tar-y, under the power of, or paying tribute to, another state. (L. *tribuere*, to bestow.)

de-clined', gone down; become less.

1. *Filligree*, a kind of open fabric woven of gold and silver.

## 19.—INDIA.—V.

**1. Great Cities.**—(i) There is in India a very great number of large towns and cities. In British India alone there are 50 towns with more than 50,000 inhabitants. The largest city in the whole country is **Bombay**, which contains nearly 800,000 souls, and is therefore a half larger than Liverpool. The name *Bombay* means *good harbour*. The town was presented to Great Britain by the Portuguese, as part of the dowry of Catharine, a princess of Portugal, when she married Charles II. Bombay is the headquarters of the Eastern trade, and has grown much and thriven greatly since the opening of the Suez Canal. It is also the capital of the important Presidency of Bombay.

**2. Great Cities.**—(ii) The second largest town in India is **Calcutta**, the capital, not only of the Presidency of Bengal, but of the whole of British India. On the one hand, it stands at the head of ocean navigation; on the other, railways branch from it in every direction. Thus it holds within itself the centres of

trade by land and sea. The British quarter contains so many large and splendid mansions, built for air and coolness, that it has been called a "city of palaces." The population of the whole city amounts to nearly 700,000. . . The third largest town is **Madras**, the capital of the Madras Presidency. It stretches along the sea-coast a distance of nine miles, with an average breadth of nearly three. A surf-beaten coast it is, on which the ocean-billows thunder and fall day and night; and ships are unable to approach, but have to lie off, in the roads, and have their cargoes conveyed to shore in small boats. These are driven through the surf with great skill and coolness by the Madrassee boatmen.

**3. Remarkable Cities.**—(i) **Lucknow**, the capital of the former kingdom of **Oude**, is famous for the relief of its garrison by General Havelock, after the most terrible sufferings from hunger, thirst, heat, disease, and wounds, in the memorable year of the revolt of 1857. . . **Benares**, on the Ganges, is the most holy city of the Hindoos. Learned Brahmins, serpent-charmers, vendors of wares, worshippers, pilgrims, and dirty beggars, frequent in thousands the splendid river-side marble stairs, called *ghats*. Here they bathe, pray, preach, gossip, trade, lounge, sleep, and die; and the whole sight forms a motley spectacle of the most varied colouring—of rags, filth, disease, deformity, squalor, poverty, and wealth. . . **Delhi**, which stands on the Jumna, was the old Mohammedan capital of India, and the seat of the empire of the Great Mogul. It contains the most wonderful display of architectural ruins in the world.

**4. Remarkable Cities.**—(ii) **Patna**, on the Ganges—a town nearly as populous as Delhi—is little more than a vast collection of mud-huts, where a great deal of rice and



opium is stored and sold. . . **Cawnpore**, on the Ganges, is a city never to be forgotten by the British, as the scene of a fearful massacre of women and children, by order of Nana Sahib, in 1857. . .

**Allahabad**, at the junction of the Jumna and Ganges, is perhaps the



Benares.

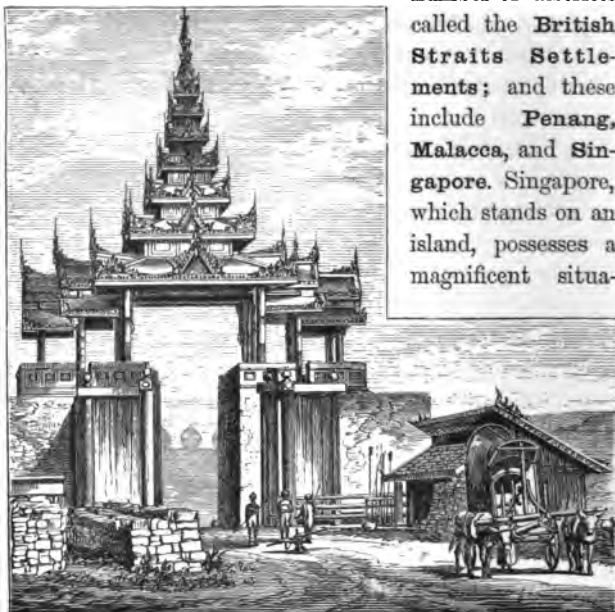
most central point of the empire. It stands on the great Peninsular Railway. . . **Hyderabad**, in the Deccan, the fourth town in the empire, occupies a fine and healthy site on the central table-land. . . **Lahore**, the old capital of the Punjaub, stands on the Ravee. . . **Rangoon** is the chief seaport of British Burmah. It has one of the finest Buddhist pagodas in the world. There is more intellectual life in Rangoon than in most of the Eastern cities—it has already four native printing-presses.

**5. Railways.**—As late as 1850, the highroads of India were mere field-tracks, along which rude cars were slowly and heavily drawn by oxen. Now all the great towns and cities of India are connected by railways and telegraphs, of which there are at present nearly 10,000 miles. It is therefore possible to go with ease from the extreme south to the furthest north, and from the furthest west to the remotest east.

**6. Farther India.**—The name of **Farther India** is given to a number of countries in the south-east of Asia. It includes **British Burmah**, a long and very fertile stretch of land on the eastern side of the Bay of Bengal. The central district of **Pegu** is the richest division; and on the delta of the Irrawaddy are grown large crops of very fine rice. . . The **Empire of Burmah** is more than twice as large as Great Britain; and it has a large trade both with us and with the Chinese. **Mandalay**, “glittering with gilded pagodas,” is the capital. . . **Siam** lies in the central region of Farther India. It is a rich country watered by the Menam, which has been called the “Nile of Siam”; for on its fertilising overflow depends the wealth of the kingdom. The capital is **Bangkok**—a large city,—much of which is afloat,—of more than 600,000 inhabitants. . . The kingdom of **Annam** is nominally subject to the Empire of China; and its trade is chiefly with that country. **Hué**, the capital, has been strongly fortified by skilful French engineers. . . **Lower Cochin-China** is a French possession. It consists of a wide and very fertile rice-growing plain on both sides of the great delta of the Mekong; and the capital is **Saigon**. . . The kingdom of **Cambodia** fills a large part of the rich plain which is watered by the Mekong; but it lies higher up the river than Cochin-China. The capital is **Panom-**

**peng.** . . The peninsula of **Malacca** is ruled by a number of independent princes, chiefly Malays, who hold the rich country on the coast. Great Britain, however, holds a number of districts

called the **British Straits Settlements**; and these include **Penang**, **Malacca**, and **Singapore**. Singapore, which stands on an island, possesses a magnificent situa-



City Gate, Mandalay.

tion for commerce, commanding, as it does, the trade of the south of China as well as of the Indian Seas.

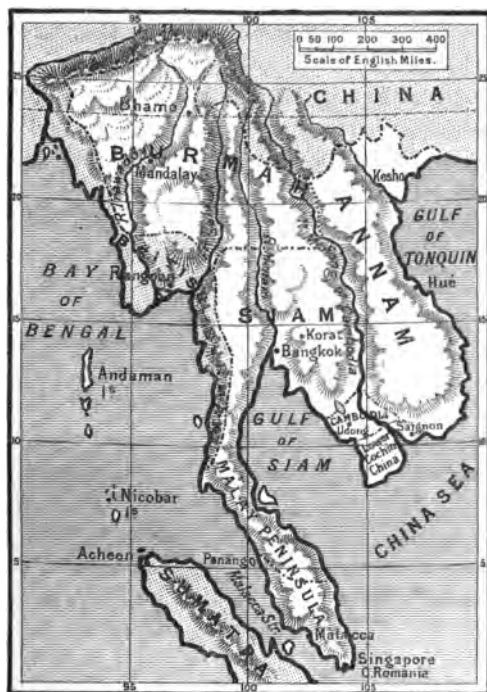
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<b>ven'-dors</b> , sellers. ( <i>L. vendēre</i> , to sell.)	<b>de-form'-i-ty</b> , want of proper form;
<b>mot'-ley</b> , consisting of many parts	ugliness.
or colours that do not harmonise.	<b>squal'-or</b> , dirtiness; filth.

1. **Great Mogúl**, a general name for the emperors of Delhi, the rulers of the

great Mongol empire, established in Hindostan. They lost all authority early in this century.

2. **Pagoda**, an Indian idol and its temple.



Map of Farther India.

## 20.—RUSSIA IN ASIA, AND TURKESTAN.

1. **Siberia**.—The vast country of Siberia fills the whole north of Asia, and is about fifty-five times as long as Great Britain. It is mostly a low and pretty level land,

with ranges of mountains on its southern and its eastern borders. Its eastern coast is very mountainous ; and in the peninsula of Kamtchatka is a range of mountains, in which are fourteen volcanoes—one more than three miles high. The three great rivers, though their course is through a very level and even flat country, do not overflow their banks—which are, in some places, from 60 to 100 feet high. These rivers are the highways—and the chief highways—of the country ; and steamers ply upon many parts of them. The chief lake in Siberia is **Baikal**,—a lake about half the size of Scotland, and with waters—noted for their wonderful clearness—deeper than the very deepest part of the Mediterranean. It lies on the high-road of traffic between China and Russia—a highroad along which is carried the finest tea, and also large quantities of the coarsest, which is known as brick-tea, for the use of all classes of the tea-loving Russians.

**2. Productions of Siberia.**—The upper basin of the Obi is the land of wheat. East of Tomsk is the wide forest-land, the tall Siberian cedar being one of the prominent trees among the vast belts of wood, which it overtops,—a solid mass of foliage which crowns the forest. In the short hot summer, fine grapes are grown round Tomsk ; but the climate increases in rigour, while the ground decreases in fertility, as we go to the east. **Yakutsk**, on the Lena, in about the latitude of St Petersburg, is the coldest town on the face of the earth ; and the mercury is often frozen, and can tell no tales for about three months in the year. . . Metals, furs, and “fossil ivory” may be said to be the chief products of Siberia. The northern border of Asia is “a great graveyard of the mammoth” ; and these huge animals, whose bodies

were carried down by the rivers to the Arctic shores, are found with flesh and skin quite fresh, and tusks unbroken and unharmed. . . **Tobolsk**, on the Tobol, is the chief centre of Siberian commerce with Europe ; and it has been visited by steamers from Hull.

**3. Russian Central Asia.**—The Empire of Russia has not only spread itself east over Asia, but has a constant desire to spread itself to the south. It has lately acquired



Kirghiz Court of Justice.

Russian Turkestan, or the basin of the Sir Daria, which flows into the pea-green Sea of Aral. The climate of this country is one of extremes ; and in the Sir Daria basin a hot wind laden with fine dust blows, in the autumn, sometimes for a week at a time. The Sir Daria valley was once fertile and very populous ; now it is but thinly peopled. It is said to have been at one time so full of orchards that a nightingale could fly from branch

to branch of the fruit-trees all the way down to the Sea of Aral . . . The natives are Mongol Tartars ; and the best known tribes are the Kirghiz and the Turkomans . . . The towns are of the most primitive kind. High walls of baked brick are built round them ; and the houses are of mud, thatched with reeds. Gardens, orchards, and vineyards surround the houses ; and there is not in these towns anything that corresponds to our idea of a street. . . **Tashkend**, which stands in a perfect forest of fruit-trees, is the centre of trade for this region ; while **Samarcand**, to the south of it, is famous as the capital of the empire of Tamerlane.

**4. Western Turkestan.**—**Western Turkestan** is the name of the larger part of the basin of the Amoo Daria. There are in it two Khanates—of **Khiva** and of **Bokhara**. The former is tributary to Russia. The city of **Bokhara** is one of the largest towns in Central Asia, and is nearly as large as Leicester. Its bazaars are filled with goods from all parts of the world ; and it possesses manufactures of cottons and of silks . . . The city of **Khiva** is a small but very picturesque city, built of the grey clay which is so common in this country.

**5. Eastern Turkestan.**—This country now belongs to China. It lies between the Thian Shan and the Kuen-Lun Mountains, and has been described as a “saucer with a rim consisting on three sides of snow-clad mountains about 20,000 feet high.” The chief river is the Tarim, which is lost in the marshy lake called Lob Nor. So severe is the winter, that the Tarim, though in the latitude of the south of Italy, is frozen over for more than three months in the year. The largest town is **Yarkand**, the rival of Bokhara in size and Mohammedan learning. It

possesses sixty endowed colleges for the study of divinity and law. But the capital is **Kashgar**, which has a fame for the weaving of lovely gold and silver cloths.

**prom'i-nent**, well marked; well known.

**rig'our**, hardness; severity.

**prim'i-tive**, rude; belonging to for-

mer times. (L. *primus*, first.)

**bas-sars'**, market-places.

**en-dowed'**, enriched with gifts for their support.

1. **Mercury**. Mercury freezes with a cold of from 80° to 40° below zero Fahr. For showing lower colds an alcohol thermometer is used.

2. **Mammoth**. The mammoth was a large animal like the elephant, but with rough hair covering its body. It had enormous ivory tusks, which curved round into an almost perfect circle. It lived in the northern countries of Europe, and even in Britain. Bodies of the mammoth are often found in huge blocks of ice, especially in the north of Siberia, and are preserved quite fresh and good.

3. **Tamerlane**, a great conqueror of Central Asia who lived in the fourteenth century.

4. **Khanate**, the kingdom ruled over by a *khan* or prince. It is from the same root as *king*.

## 21.—TURKEY IN ASIA.

1. **Extent and Boundaries**.—**Asiatic Turkey** is about six times as large as Turkey in Europe, though it contains only about double the number of inhabitants. It is bathed by the waters of six seas—the Levant, the Archipelago, the Sea of Marmora, the Black Sea, the Persian Gulf, and the Red Sea. It has Persia on its eastern border; and it overlaps Arabia on two sides. It comprises several countries—such as **Asia Minor**, part of **Armenia**, **Syria** (with **Palestine**), **Mesopotamia**, and **Arabistan**.

2. **Build and River-basins**.—Most of Asiatic Turkey is occupied by a high table-land, which is buttressed by lofty mountain-ranges, and which, in the east, runs into



the table-land of Armenia. The south buttress of the table-land is **Mount Taurus**. . Armenia is a table-land which rises into the air to the height of about  $1\frac{1}{2}$  miles ; and its highest point is the famous mountain, **Mount Ararat**. . . The chief river-basin of Asiatic Turkey is the joint basin of the **Euphrates** and **Tigris**.

**3. Syria.**—**Syria**—the coast of which is called the **Levant**—is a long narrow strip of seaboard, with ranges of mountains, broken by long valleys which run from north to south. It contains three areas of continental drainage—the area of Aleppo, that of Damascus, and that of the Jordan basin. The Jordan flows through a valley most of which is sunk below the level of the Mediterranean. The waters of the **Sea of Galilee** are nearly 700 feet below the Mediterranean level ; those of the **Dead Sea** nearly 1300 feet. The great saltiness of the Dead Sea is due to a ridge of rock-salt which runs along its southern shore, and which is about 300 feet high, seven miles long, and half a mile wide. . . The peninsula of Sinai, which projects into the Red Sea, contains **Jebel Musa**, the modern name for Mount Sinai, a mountain nearly 8000 feet high.

**4. Chief Towns.** — (i) The largest towns in Asiatic Turkey are **Smyrna** and **Damascus**. Smyrna, with 150,000 inhabitants, at the head of the Gulf of Smyrna, is the Liverpool of the Levant. Its streets are narrow and dirty ; but its spacious and well-stored bazaars are filled with every kind of European manufacture. . . **Damascus**, the chief town in Syria, stands on a high table-land, at the foot of the mountain-range called the Anti-Lebanon. It is the chief town in Syria, and is thought to be the most ancient city in the world. It is watered

by the Abana and Pharpar, lucid streams ; was once famous for the swords called “Damascus blades” ; but is now a seat of commerce and of the manufacture of silk goods. . . **Beyrout** is the port of Damascus, though a hundred miles away. . . **Jerusalem**, which stands on a high plateau, about thirty miles from the Mediterranean, and fifteen from the Dead Sea, is the most famous city in the world. The Arabs call it the Holy City. It has neither industries nor commerce ; and any prosperity it has is due to the crowds of pilgrims, Christian, Jewish, and Mohammedan, who



Mohammedan at Prayer.

visit the Holy Places, towards which the hearts and eyes of many millions are daily turned.

**5. Chief Towns.**—(ii) **Bagdad**, on the Tigris, is a city of ancient fame, for it was long the capital of the Kaliphs of the great Saracen Empire. This city was once the most brilliant capital of the Moslem world ; and is everywhere spoken of in the ‘Arabian Nights.’ But now—though it has a caravan trade with Damascus and Aleppo—the gates are in ruins, by the roads stand piles of rubbish and cesspools, while dogs and vultures and carrion-crows feed on the putrid carcasses that lie strewn

on the path of the traveller. . . In Arabistan—the *stan* or country of the Arabs—which is also called Turkish Arabia, are two cities which are sacred in the thoughts and dear to the hearts of every good Mussulman. They are the port of **Medina**, which contains the tomb of Mohammed; and **Mecca**, which is still more sacred, as being the birthplace of the prophet.

**6. The Islands.**—Cyprus, the largest island in the Levant, is now under the protection of Great Britain. . . **Rhodes**, a small island with forest-clad mountains, rich meadows, lovely and fertile valleys, and an excellent climate, is called “the gem of the Levant.” Its port was once famous for a high brazen statue, called the Colossus of Rhodes, between the legs of which the tallest ships sailed into the world-famed harbour. . . There are in the *Ægean* many other islands which belong to Turkey.

**spe'-cious**, large and roomy.

**lu'-cid**, clear and bright. (L. *lux*, light.)

**man-u-fac'-ture**, the *making* of goods

by *hand*. (L. *manus*, a hand; *facere*, to make.)

**pu'-trid**, rotten.

**car'-cass-es**, dead bodies.

1. **Levant'**, the land of the *rising* sun. (L. *levāre*, to raise.)
2. **Continental drainage**, part of a country the rivers of which have no connection with the ocean.
3. **Rock-salt**. In many parts there are whole hills of rock-salt; and in Europe there are several very large mines in which the salt is dug out, as coal or iron is.
4. **Kaliphs of the Saracen Empire**. The Saracens came from Central Asia and overran the west of Asia and east of Europe; their kings were called Kaliphs.
5. **Mohammed**, the great prophet whose followers are spread over the whole of Western Asia. He was the founder of the Mohammedan religion.
6. **Colossus**. Anything beyond ordinary size is called from this *colossal*.

## 22.—ARABIA AND PERSIA.

1. **Arabia.**—**Arabia** is a high table-land, most of which is a desert. It forms, indeed, part of the great belt of deserts which runs through the Old World, from the shores of the Atlantic to those of the North Pacific. Vast tracts of shifting sands, varied by low ranges of barren and rocky hills—such is the general character of the Arabian desert. . . Its climate is like that of Africa—hot and dry. In some parts hardly a refreshing shower falls in the course of the year, and there is no green thing to be seen; in others, the date-palm is the only sign of vegetable life. Gazelles and ostriches haunt the green oases of the deserts; while the lion, panther, hyena, and jackal are the most common beasts of prey.



Arabian Coffee-Tree and Fruit.

2. **The Simoom.**—The simoom, or “poison-blast,” is one of the greatest dangers in crossing the desert. Hot gusts or puffs of wind come up suddenly and with vio-

lence; the horizon quickly darkens to the hue of deep violet; the whole sky becomes black, and seems to close in like curtains; while at the same time a hot and stifling blast—as if from an oven—blows steadily under the thick gloom. The camels of the caravan lie as if dead, their muzzles buried in the sand; the men wrap up their heads and lie upon their faces. The worst heat of the simoom lasts for about ten minutes; and it is as if a red-hot iron were slowly passed over the body. But the simoom itself may blow for several hours. When it is past, the travellers rise, half dead with exhaustion, and as pale as corpses. This terrible wind does not always carry sand or dust; but it sometimes drives along such terrible columns of sand that they have been known to bury large caravans, and even great armies.

**3. Productions of Arabia.**—The most valuable plants are the date-palms, of which there are more than a hundred different kinds. They grow in all the oases, and supply, in fact, the chief staple of food. Excellent coffee, too, grows in the south-west, and is exported from Mocha; while all kinds of medicinal plants—such as myrrh, balsam, and senna—have been supplied by Arabia to the markets of the world for ages. The finest fruits—such as peaches, apricots, and figs—are also grown in the south-west; while cotton is cultivated in the south-east.

**4. The Arabs.**—The people of Arabia may be divided into two classes: the **Arabs**, or settled inhabitants of the towns and villages; and the **Bedouins** (or Bedwins)—the wanderers who feed their flocks in the open pastures of the plain or in the oases of the desert. The genuine Arab is a noble-looking man, of middle height, spare but muscular, and of dark-brown complexion. He is by birth and education a Mohammedan. The Bedouin is the same wild herdsman

that his forefathers were two thousand years ago. A Bedouin encampment is somewhat like that of the gipsies. Women in dark-brown cloaks grinding corn in stone hand-mills; children, goats, and dogs all playing together; the men lounging about smoking, or sitting on the ground drinking coffee,—such is an ordinary picture of Bedouin home-life.



Arabian Women Grinding Corn.

**5. The Towns of Arabia.**—Even in Central Arabia there are well-built towns. . . The largest town in the whole country is **Muscat**, which is the capital of Oman, in the south-east. It is about the same size as Bath. It stands amid lovely fruit-gardens and clumps of date-palms; and it is one of the few good harbours of Arabia. Including Muscat, there are in the country seven towns, each of which has more than twenty thousand inhabitants.

**6. The Eastern Gibraltar.**—**Aden**, which stands at the gate of the Red Sea, belongs to England, and may be regarded as the Gibraltar of the East. Like Gibraltar, it stands on a rocky peninsula, which is connected with the mainland by a low and narrow isthmus. Rain falls but once in three years; and the climate is so fine that it was

called *Aden* or *Eden* by the Arabs. It has the best harbour in the whole of Arabia.

**7. Persia or Iran.**—**Persia** is a country which lies between the Caspian Sea on the **north**, the Persian Gulf and the Gulf of Oman on the **south**, Turkey in Asia on the **west**, and Afghanistan and Beloochistan on the **east**. It is a country of high table-lands, lofty mountain-ranges, inland drainage-basins, and sandy deserts. The table-lands are mostly at the height of a mile above the sea-level; the rivers fall into brackish lakes or marshes; and there is not a single navigable stream that finds its way to the sea. The whole country is shaped like a basin, with the edges rising on all sides. The sand in many parts is gaining on the arable land, and even here and there buries towns. Persia possesses some seaboard on the Caspian; but the Persians are no sailors, and the Russians alone have navies on that sea. The **Elburz** range of mountains, besides, shuts out the table-land from the Caspian. The highest peak of the range is **Mount Demavend**, a volcano more than 18,000 feet high.

**8. Chief Towns.**—The capital of Persia is **Teheran**—a town with narrow, ill-paved streets, bad air, worse water, and overpowering heat in the summer. The walls are of mud; and the houses are of mud,—“and beside each house yawns the hole out of which it was taken.” . . There are altogether in Persia twelve towns which have more than 20,000 inhabitants. . . There are no roads in the country, and no wheeled carriages. Mules on the mountains, camels on the plains—these are the only means of conveyance.

**9. The Persians.**—The Persian has been called the Frenchman of the East. He has ready wit, a polite and persuasive manner, and great animation in his talk. He

presents a great contrast to the Turk. The Turk is a man of few words and grave speech; the Persian is fluent in conversation and flowery in description. The Turk is a quiet farmer, a plain man, and a soldier; the Persian is a man of the world, a trader, and an artist. . . The ruler of Persia calls himself the **Shah-en-Shah**, or "King of Kings."

**sti'-fing**, choking; suffocating.  
**ex-haust'-ion**, complete weariness.  
**med-ic'-in-al**, used in medicine.  
**gen'-u-ine**, true-born.

**spare**, slim.  
**brack'-ish**, half fresh and half salt.  
**ar'-a-ble**, land under the plough. (L.  
*arāre*, to plough.)

1. **Gazelles**, small animals of the deer kind, found most generally in Africa.
2. **Ostrich**, the largest bird on the face of the earth. Its feathers are very valuable as articles of commerce.
3. **Oāsis**, a spot in a desert which is made green and fertile by springs rising through the sand.
4. **Panther**, an animal of the cat kind, much smaller than a lion, and with a spotted skin.
5. **Hyena**, a wild animal which lives in Africa and Southern Asia. It is larger than a large dog; has a rough, shaggy coat; and its hind parts are much lower than its fore parts.
6. **Jackal**, a small animal somewhat like a fox, but rather larger.

## 23.—AFGHANISTAN AND BELOOCHISTAN.

1. **Afghanistan**.—*Stan* is an Eastern word for country; and hence **Afghanistan** means the country of the Afghans. Afghanistan is a country almost square in shape, stretching about 500 miles each way, and is somewhat larger than France. It has the north of India on its eastern side; and it has always been a troublesome neighbour to our Indian possessions. The mighty chain of the Hindoo Koosh forms its boundary on the north. It is an elevated table-land of rock, sand, and gravel, traversed by ranges of rocky mountains and hills. High mountains, deep and



narrow valleys, ravines almost hidden from the sun, lofty table-lands—these go to make up most of Afghanistan. The chief river is the **Kabul**, which flows into the Indus; the largest river is the **Helmund**, which flows into the lake or swamp Seistan, in Persia.

**2. Climate and Productions.**—The heights are very cold; the deep valleys intolerably hot; the air on the uplands dry, cool, and bracing. There are four well-marked seasons; and the streets of Kabul, the capital, are blocked with snow for three months in the year. . . Most of the country is bare and rugged; only the valleys and lower mountain-slopes are cultivated. The lion is seen now and then; the leopard is common; and wolves, hyenas, and bears haunt the forests. The horses of Afghanistan are eagerly bought in India; and large droves of broad-tailed sheep are usual on the pastures. . . In the more fertile parts of the country two crops in the year are raised. The spring harvest consists of wheat and barley; the autumn harvest, of rice, maize, and tobacco. The orchards and melon-gardens of Afghanistan are the finest in the world; and the apples, grapes, and pomegranates of the country are celebrated through the whole of India. Cotton and sugar thrive in the lower and well-watered valleys.

**3. The Afghans.**—The pure Afghans are finely built men, with long beards, hook-noses, and dark-brown complexions. They call themselves Sons of Israel, and boast of their descent from Saul. . . In addition to the Afghans, there are a number of other tribes and races in the country; and many of them, living apart in their own saucer-like valley, are completely independent of the rule of the Ameer. The pure Afghan “never keeps a shop; and the army is his native profession.” The chief industries are

agriculture, gardening, the weaving of coarse woollen cloths, and the manufacture of weapons.

**4. The Chief Towns.**—The capital of Afghanistan is **Kabul**, a town which stands on the river of the same name, at an elevation of about a mile and a quarter above the level of the sea. It stands on a flat plain, surrounded by mountains, and consists of houses mostly built of sun-dried bricks. It was in this city that the British Resident was, with all his soldiers and attendants, treacherously murdered in the year 1879. Kabul is said to have a population of about 70,000. The other two large towns are **Kandahar** and **Herat**; and all three stand at the corners of a triangle.

**5. Beloochistan.**—The country called **Beloochistan**, or the country of the Beloochees, is as large as Great Britain; but its total population is said to be under a million. It is also a high, rocky, and barren table-land; and it is almost as riverless as Arabia. Most of the rivers flow into inland basins. One, the Dasti, does reach the sea, and is said to be 1000 miles long. But, when it flows into the Arabian Sea, its depth is less than two feet, and its breadth only a few yards,—so much has it shrunk on the way. The seaboard of the country is a low, hot, sandy desert, where only the date-palm can grow.

**6. The Capital.**—The only town of any importance—there are very many villages—is **Khelat**, the capital, though its population amounts to no more than 6000 souls. The Khan of Khelat is the ruler of the country; and he is assisted by the British Government, because he is the owner and keeper of the Bolan Pass—one of the great gates of our Empire of India.

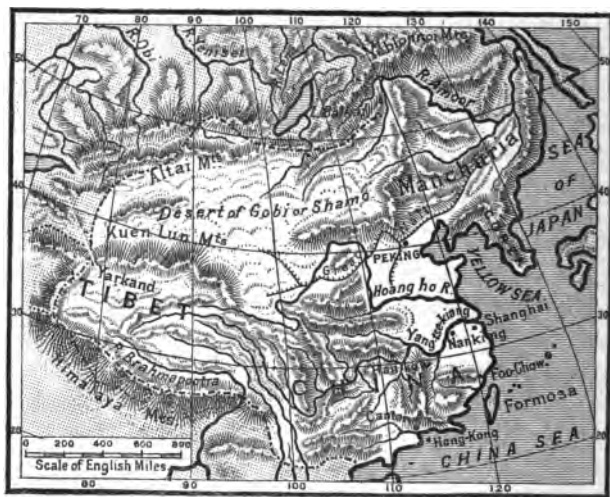
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trav'-ersed, crossed. | brac'-ing, strengthening.  
cel'-e-brat-ed, well known.

1. **Ravines**, deep, narrow, rocky mountain-valleys.
2. **Swamp**, a soft and marshy piece of ground.
3. **Leopard**. The leopard is very like the panther.
4. **Broad-tailed sheep**. These are the Kirghiz sheep, which have broad flat tails, some of which give 40 pounds of fat.
5. **Pomegranate**, the fruit of a small shrub. The fruit is about the size of a small orange.
6. **So much has it ahrunken, etc.** Most of the water has gone off by evaporation in passing through the hot sands of the country.

## 24.—CHINA.—I.

1. **The Chinese Empire.**—The Empire of China is the most populous empire in the world; and it is one



Map of China.

of the largest. It embraces not only **China Proper**, but **Manchuria**, **Mongolia**, **Great Tibet**, and **Eastern Turkestan**. These countries contain every kind of cli-

mate and product; and Tibet alone is said to have a population of 9,000,000.

**2. China Proper.**—But it is with China itself that we have chiefly now to do. This great country has a population of about 400 millions, and is the most densely peopled land in the world. A country where the cabs are driven by sails, where ships have no keels, workmen no Sundays, and magistrates no sense of honour; where the mourning dress is white, and a guest is placed on the left hand,—must be a very strange country. China Proper stretches back from the coast of the Pacific for more than a thousand miles. Two-thirds of the country is mountainous. Containing, as it does, every kind of climate and production—everything needful for exchange between its different parts—China has always been independent of the rest of the world, and has always resented the intrusion of the foreigner. Its most fertile part is the great alluvial plain which lies on the lower parts of the Yang-tse-Kiang or “Blue River,” and the Hoang-Ho or “Yellow River.” This plain, which is called the **Great Plain**, and is the richest granary in the world, lies between the great cities of Peking and Nanking, is more than three times as large as the whole of England, is formed of the softest and richest soil in the world, and in the larger part of it not a stone or a pebble is anywhere to be found.

**3. The Rivers and Canals of China.**—No country in the world is better watered than China; no country has a richer or more highly developed system of canals both for irrigation and for navigation. The two greatest rivers of China are the **Yang-tse-Kiang** and the **Hoang-Ho**. The former is the great highway of China, and is navigable for 1000 miles up. Even great English ocean-steamers go to Hankow, about 700 miles up, and take

in their cargoes of tea there. Its basin comprises nearly one-half of China Proper; some of the richest land in the world; and a population on its banks of more than 100 millions, several millions of whom are born, live, and die afloat. It is subject to the most terrible and disastrous floods. But its floods are not so disastrous as those of the Hoang-Ho, which—about thirty years ago—broke through its embankments, and cut a way for itself into the Gulf of Pe-chi-li, more than 200 miles north of its old mouth. The Yellow Sea, a lemon-coloured stretch of water, receives its name and colour from the mud brought down by the Hoang-Ho. But both rivers serve two great and beneficent purposes,—the one of fertilising the soil by the mud they bring down, the other of flooding the fields in which rice, the staple food of the country, is planted and grown. The whole low-land of China is covered with a network of canals, both large and small, which are at once highroads and means of irrigation. The chief is the **Grand Canal**, which is said to be 700 miles long. It connects the lower courses of the two great rivers of China.

**4. The Chinese Wall.**—The northern frontier of China is separated from Mongolia by the Chinese Wall—the most remarkable artificial bulwark in the world. It was built about 2000 years ago—as a defence against the Mongol barbarians of the north; but the emperor now on the throne of China is a Mongol. It is about 1500 miles long; and is built over mountain and valley, across rushing rivers and deep ravines, through barren rocks and fertile fields. It is a rampart of earth from ten to thirty feet high, broad enough at the top to allow of several horsemen riding abreast. It was at one time cased with bricks, flanked by numerous towers,

and pierced with gates for travellers and the collection of customs, dues, and taxes. It is now in ruins in many places; and the Chinese themselves have swarmed outside and settled in the country north of the Great Wall.

**5. Yellow Earth.**—In the basin of the Hoang-Ho we find a very rich and remarkable kind of soil called “yellow earth,” or **Loess**. This earth



The Great Wall of China.

covers an area as large as that of France. In these regions all is yellow—hills, roads, fields, houses, brooks, rivers; even the plants are covered with a yellow dust, and the smallest breath of wind raises in the air clouds of the finest yellow powder. The Emperor himself is the “Yellow Sovereign”; and yellow is the imperial colour. The layers of yellow earth are in some places 1000 feet thick; and the tops of the harder hills

appear like islands in the middle of a sea. In many districts in this yellow land the inhabitants live in caves and houses cut into the earth. Even inns and public buildings have been cut out of this soft soil. Here and there high blocks are completely isolated; and the natives have built on the top of them fortified temples, in which they take refuge in times of civil war. This yellow earth is more fertile than the richest alluvial soil; it brings forth harvests every year: it has done so for many centuries; and it is not necessary to add manure. Here and there breaches are to be found in it; and deep ravines with perpendicular walls open before the traveller. Through these narrow fissures only one cart can go at a time; and the drivers utter long and loud cries to give notice of their approach, and to warn the others to take refuge in a siding.

**em-bra'-ces**, includes; contains.

**re-sent'-ed**, been indignant at.

**in-tru'-sion**, the coming in without permission. (L. *in*, in; *trudere*, to thrust.)

**dis-as'-trous**, ruinous.

**ben-ef-i-cent**, good and useful. (L. *bene*, well; *facere*, to do.)

**bul'-wark**, a *work* of defence—originally made of the *boles* or trunks of

trees.

**gran'-ar-y**, generally a place where *grain* is stored. Here used of the place where it is grown.

**ar-ti-fi'-cial**, built by man; not natural.

**flanked by**, having on the sides or flanks.

**fis'-sures**, narrow openings.

1. **Customs, dues, and taxes**—that is, on the articles that passed in and out of the country.

2. **Imperial colour**, the colour worn by the emperor on state occasions.

## 25.—CHINA.—II.

1. **Climate**.—China, stretching as it does through 20 degrees of latitude, and containing lands of all heights above the level of the sea, must have every variety of climate.

But, on the whole, it has an excessive or continental climate, though the greater part of it lies in the temperate zone. "Peking," says a writer, "has a summer like that of Naples; a winter like that of Stockholm." Snow lies on the ground for three months, and yet Peking is in the latitude of the middle of Spain. The towns in the south are "like furnaces" in the months of July, August, and September. The middle zone has two rainy and two dry seasons in the year; and this is the zone of tea and silk. On the whole, the climate is dry and healthy, owing in a great measure to the universal cultivation of the surface of the country.

**2. Vegetation.** — Flowers abound everywhere — roses, camellias, Indian pride, and a hundred others. Not without good reason is China called the "Central Flowery Land." . . Rice, which is the staple food of the country, is grown in all the lower grounds; wheat in the higher. Indeed, in some places, the same ground produces both crops in one year—rice in the hot season, and wheat in the cold. . . The mulberry-tree is very widely grown for the use of the silk-worm, and every one in China who can afford it wears silk. Cotton is also largely grown, and especially in the *loess* or yellow-earth districts. Tea is the chief product of many rich provinces, and to us it is the most important. We pay about £8,000,000 a-year to the Chinese for our tea. The leaves are gathered three times; and the first gathering, which takes place in April, gives by far the best tea. . . The fourth plant much cultivated, is the poppy, for opium. In the south its cultivation is the chief industry of the people. The Chinese opium is inferior to that of India; but it is largely consumed by the poorer classes. . . Every inch of ground that can be used is used; and mountain-



slopes are cultivated up which a man has to crawl on his hands and feet. The great friend of the poor Chinaman is the bamboo. His hut is built of its trunk and branches, and thatched with its leaves; his furniture is made of bamboo; his water-jars, basins, measures for grain, buckets, mats, fans, pipes—even the paper he writes on and the pen he writes with, his coat and hat—are all made of the useful and beneficent bamboo.

**3. Coal and Metals.**—China is richer in coal than any other country in the world—even than the United States; but it is little and badly worked. In one province there is a coal-basin, the surface area of which is estimated at 100,000 square miles—that is, nearly twice as large as England. The amount of coal in China is “sufficient,” says Sir Richard Temple, “to revolutionise the trade of the whole world.” . . China is also very rich in metals. The largest and richest gold-workings in the world are to be found in Yunnan, a large province in the south. . . While agriculture is the chief pursuit of the Chinese, they are very clever at making pottery, pipes, and in the working of metals.

**4. The Chinese.**—The Chinese belong to the Mongolian race. The skin is a dull yellow, like parchment; the hair is coarse and black and long; the cheek-bones high; the eyes slanting towards the nose. The hair is worn by the men in long tails; and the women take a pride in cramping their feet till they are only about  $3\frac{1}{2}$  inches long. Within China Proper the people are *one* people, of one type, and that type more uniform than in any other part of the globe; and they have one language. Though China Proper possesses twenty provinces, and though most of these provinces are larger than England—several of them twice as large—the types of face vary very little,

and the language still less. . . The men of learning are held in the highest honour; they fill all good posts; they gain their places by examination; and the Chinese are examined even when past the age of eighty.

**5. The Large Towns.**—There are in China more large towns than in any country in the world. There are four towns, each of which has more than a million inhabitants. These are **Canton** (with a million and a half), **Peking**, **Siangtan-fu**, and **Singan-fu**. There are fourteen with



Chinese Palanquin.

over half a million each—that is, larger than Liverpool. There are twenty with from 200,000 to 400,000 inhabitants—that is, varying from the size of Greenwich to that of Birmingham; and there are twelve more with populations above 100,000. . . At Canton there is a floating population of about 300,000 on the river and the canals. The better class have one boat for their house, one for their garden, one for their kitchen, and so on.

**6. The Capital.**—The capital of China for about the last five hundred years has been **Peking**—a word which means North Court. Before 1408 the capital was **Nanking**, or South Court. Peking consists of two cities, the Tartar and the Chinese. The Tartar city is the handsomer; the Chinese has all the trade. The emperor's private

residence is called "The Tranquil Palace of Heaven." It is encircled by a wall of clay faced with bricks, about 40 feet high, and 12 feet broad at the top. . . A Chinese city is a wilderness of tiles and cornered roofs, with overlapping eaves shutting out light and air, a labyrinth of narrow and filthy streets (called by odd names, such as Bad Small Street, Dog's Tooth Street), overtopped by the high square towers of the pawnbrokers, and the turrets and towers of temples and pagodas.

rev-ol-u'-tion-ise, to cause a complete change in anything. (L. *re*, back; *volvere*, to roll.)  
 pot'-ter-y, earthenware pots or vessels.  
 tran'-quil, quiet; peaceful.

eaves, the part of a roof which juts out over the walls.  
 lab'-y-rinth, a place full of winding and difficult passages.

1. The silk-worm is a small worm which feeds chiefly on the leaves of the mulberry-tree. After it has lived for some time as a worm, it spins for itself a small silky case, called a cocoon, where it lies till the following year, when, if it were allowed, it would come out as a moth. Usually, however, the worm is killed in the cocoon, so as not to spoil the silk by bursting it open.

2. Parchment, the prepared skins of animals used to write on.

3. Floating population—that is, they live in houses built on boats on the river.

## 26.—JAPAN.

1. **The Japanese Islands.**—The Empire of Japan consists of a range of islands, which lie in the Pacific Ocean in the form of a crescent moon. There are four large islands, **Nippon** (which is nearly as large as Great Britain), **Shikoku**, **Kiushiu**, and **Yesso**, along with more than three thousand islets, large and small. Between Shikoku and Nippon lies the Inland Sea, which, with its countless islets, bluffs, headlands, inlets, its clear waters, its combination of highland grandeur with lowland beauty,

presents a panorama of unrivalled scenery. The coast-line is long, broken, and much indented; and there are many excellent bays and harbours. The larger islands are lands of mountain, hill, stream, fertile and romantic vale; and everywhere there are signs of volcanic origin. Much of the empire is a land of earthquakes and volcanoes. Near the centre of Nippon, and within sight of the capital of the country, rises—to the height of more than 14,000 feet—the solitary snow-clad volcanic cone of **Fusi-yama**. This volcano is now extinct; and **Asamasa-ma** is the highest active volcano.



Map of Japan.

The rivers are chiefly mountain-torrents, bringing down vast quantities of mud, and they are too shallow to be navigable.

**2. Climate and Products.**—Japan lies entirely within

the temperate zone. The northern island has a very cold, almost a Siberian climate; the southern islands enjoy a climate warmer than even that of the south of Italy. The vegetation of Japan is one of the richest and most varied on the globe. Its most marked feature is the intermixture of tropical trees, such as the bamboo, the palm, and the tree-fern, with those of the temperate zone, like the pine, the oak (which yields an edible acorn), and the beech. Characteristic trees are the paper-mulberry, the vegetable wax-tree, and the lacquer-tree. The staple crop is rice; but maize and wheat, tobacco, tea, and cotton, are largely grown. The tea-plant is pollarded to render it more branchy. . . The bamboo is as useful in Japan as in China. The framework of houses and most of their contents, the sails of junks, screens, mats, paper, walking-sticks, and many other things, are made of it. Owing to the almost universal cultivation of the soil, there are very few wild animals in Japan.

**3. The Japanese.**—The Japanese are the English of the East. Like the English, they have the greatest respect for what is old, but are ever ready to give a welcome to the new—provided it is good. They have also a very high sense of personal honour. The population of Japan is much denser than that of England. The complexion of the people varies from a yellow brown or olive to white among the upper classes. The eyes are long, narrow, deep-set, and slightly slanting; the hair is jet-black and very thick. Good-humour, gaiety, gentleness, and politeness are found even in the poorest classes. Agriculture is the chief occupation. Their industry is ceaseless; they have no Sabbaths; and they only take a holiday when they have nothing to do. Their spade-husbandry turns the country into one beautifully kept garden. Like the

Chinese, the Japanese are very fond of amusement ; and grandparents, parents, and children may be seen flying fantastic kites, and firing off rounds of squibs and crackers in broad daylight. They also excel in many mechanical arts ; and their metal-work is the finest in the world. Porcelain—which is finer than that of the Chinese—glass,



Yokohama.

lacquered and japanned wares, and silk, are among their other excellences. They have made paper for more than twelve centuries ; and they have lately learned, with great accuracy and speed, the chief sciences of Europe.

**4. The Chief Towns.**—The largest towns are **Tokio** (or Yedo) the capital, **Kioto** (or Miako), and **Osaka**. **Tokio** is built of wood, and it fills an area of more than seventy square miles. Rivers, canals, bridges—of which

there are more than 800 ; parks, gardens ; wooden houses, mostly of one storey ; with palaces and public buildings,—a mixture of town and country,—such is Tokio. The streets are like scenes from fairy-land. The bright skies, the sparkling waters, the glorious trees and plants, the gay people, the men with fans, the party-coloured dresses—all strike and excite the eye of the stranger. . . **Kioto** is the court town, the seat of literature and science, and—till recently—the residence of the Mikado, or sacred Emperor of Japan. It is also the religious capital of the empire, and contains nearly a thousand Buddhist temples. . . South-west of Kioto stands **Osaka**—the Venice of Japan. Tea-houses, gardens, theatres, canals, bridges, quaint wooden buildings, meet the eye of the traveller at almost every corner. . . The largest “treaty-port” is **Yokohama** ; and numerous English ships are to be constantly seen there. . . The Japanese cab is called “jinrikisha” : it is a kind of go-cart or gig upon two wheels, and is drawn by two men, tandem fashion.

**5. The Revolution of 1868.**—In the year 1868 the Japanese began a new era in their history. The nation seemed as if it had just waked from sleep. Schools and colleges were founded ; the natives were induced to wear the European dress ; our calendar was adopted ; fleets and armies were organised ; our railways, telegraphs, and postal arrangements were introduced ; and embassies sent out to the United States, France, and England. All the sciences of Europe were introduced and learned ; and it was even proposed to teach the whole nation the English language. Japanese youths are now in the schools and universities of America, England, and France ; and railways—forbidden by the Chinese—have been introduced everywhere in Japan.

cres'-cent, growing. ( <i>L. crescere</i> , to grow.) When the moon is new it has a curved form, broad in the centre, and tapering towards the ends.	un-ri'-valled, not to be matched.
com-bin-a'-tion, union.	tan'-dem faah'-ion, running one before the other.
	em'-bas-sy, a number of persons sent by one country to live at the court of another.

1. Bluff, a grassy headland running down steeply to a river or sea.
2. Panorama, a wide stretch of country laid out before one. (*Gr. pan*, all; *horao*, I see.)
3. Extinct volcanoes, those whose fires have gone out.
4. Spade-husbandry. Most of the tilling of the ground in Japan is done by hand, and with the spade.
5. Lacquered and japanned wares. The lacquer of the Japanese is prepared from the juice of the varnish-tree, and is used to coat various kinds of goods.
6. Paper. The Japanese use paper for many purposes for which we use linen and cotton, such as handkerchiefs, etc.
7. Buddhism is the religion of a great majority of the Eastern peoples.
8. Treaty-port. Formerly only a few ports were open for foreign commerce; now all the ports are opened up.

## 27.—CROSSING A HIMALAYAN GLACIER.

We were soon doomed to make a closer acquaintance with some of these enormous glaciers. Ere long we came to one which stretched down all the way into the river, so there was no chance of flanking it. At first it looked as if we were painfully crossing the huge ridges of a fallen mountain; but this soon proved to be an immense glacier, very thickly covered over with slabs of clay-slate, and with large blocks of granite, but with the solid ice underneath exposed here and there, and especially in the surfaces of the large crevasses which went down to unknown depths. Some of these edges must have been two or three hundred feet in height. This glacier, as also others which followed, was a frightfully fatiguing and exasperating thing to cross, and occupied us nearly three



hours, our guides being rather at a loss in finding a way over.

I should have been the whole day upon it, but for the astounding performance of my little Spiti mare, which now showed how wise had been the selection of it for this difficult journey. Never before had I fully realised the goat-like agility of these animals, and I almost despair of making her achievements credible. She sprang from block to block of granite, even with my weight upon her, like an ibex. No one who had not seen the performance of a Spiti pony could have believed it possible for any animal of the kind to go over the ground at all, and much less with a rider upon it. But this mare went steadily on with me up and down the ridges, over the great rough blocks of granite and the treacherous slabs of slate.

I had to dismount and walk, or rather climb, a little, only three or four times, and that not so much from necessity as from pity for the little creature, which was trembling in every limb from the great leaps and other exertions which she had to make. On these occasions she required no one to lead her, but followed us like a dog, and was obedient to the voice of her owner. Shortly before coming to the glacier I thought she was going over a precipice with me, owing to her losing her footing on coming down some high steps; but she saved herself by falling on her knees and then making a marvellous side spring. On the glacier, also, though she sometimes lost her footing, she always managed to recover it immediately in some extraordinary way. Her great exertions did not require any goad, and arose from her own spirit and eager determination to overcome the obstacles which presented themselves, though in ordinary circumstances she was perfectly placid, and content to jog along

as slowly as might be. Even when I was on this mare she would poise herself on the top of a block of granite, with her four feet close together after the manner of a goat; and she leaped across crevasses of unknown depth after having to go down a slippery slope on one side, and when, on the other, she had nothing to jump upon except steeply inclined blocks of stone.

There was something affecting in the interest which this mare, and some of the other mountain ponies I had elsewhere, took in surmounting difficulties, and not less so in the eagerness, at stiff places, of the foals which so often accompanied us without carrying any burden. Thus in early youth they get accustomed to mountain journeys and to the strenuous exertions which these involve.

At the same time the Himalayan ponies husband their breath very carefully in going up long ascents, and no urging on these occasions will force them to go faster than they think right, or prevent them from stopping every now and then just as long as they think proper. These are matters which must be left entirely to the ponies themselves, and they do not abuse the liberty which they claim. More trying is their fondness for trotting or ambling down the steepest descents on which they can at all preserve their footing. They show considerable impatience when restrained from doing so, and have expressive ways of their own of saying to their rider, "Why don't you trust me and let me go down at my own pace? I shall take you quite safely." This ambling down a precipitous mountain-side is particularly unpleasant when the path is a corkscrew one, with many and sharp turnings, because when the pony rushes down at a turning, it seems as if its impetus must carry it on

and over; but at the last moment it manages to twist itself round, so that it can proceed in another direction; and I think these intelligent little creatures take a pride in making as narrow a shave of the precipice as possible, and in making their riders feel as uncomfortable as they can. They are also great in wriggling you round delicate points of rock, where the loss of half an inch would send both horse and rider into the abyss. They do positively enjoy these ticklish places; and the more ticklish the place and the deeper the precipice below, the more do they enjoy it, and the more preternaturally sagacious do they become. They sniff at such a place with delight; get their head and neck round the turning; experiment carefully to feel that the pressure of your knee against the rock will not throw the whole concern off its balance, and then they wriggle their bodies round triumphantly.

ANDREW WILSON.<sup>1</sup>

*ex-posed'*, laid bare. (L. *ex*, out of;

*ponere*, to place.)

*ex-as'-per-at-ing*, trying to the temper.

(L. *ex*, out of; *asper*, rough.)

*cred'-i-ble*, able to be believed. (L.

*credere*, to believe.)

*re-strained'*, kept back.

*pre-ter-nat'-ur-al-ly*, beyond natural

expectation. (L. *præter*, beyond.)

1. *Crevasse*s, great and deep rents made in the body of a glacier.

## 28.—A CHINESE CROWD.

I have seen in my time some extraordinary sights, upon which I am fond of dwelling. Among these I place the spectacle of General Grant's entrance into Canton. The colour, the surroundings, the barbaric pomp, the phases of an ancient civilisation—so new, so strange, so interesting—and beyond all this teeming city, alive with wonder and

<sup>1</sup> From 'The Abode of Snow.'

curiosity, giving this one day to see the foreigner, to look in awe upon the face of the American whose coming had been discussed in every bazaar and by every silk-loom. As soon as we crossed the bridge and were carried down the stony slanting path into the street, the crowd began. It was not an American or an English crowd, swaying, eager, turbulent, some at horse-play, some bonneting their neighbours, shouting snatches of song or chaffing phrases,—but a Chinese crowd, densely packed, silent, staring. At intervals of a hundred yards were guards of soldiers, some carrying spears shaped like a trident, others with staves or pikes, and others with the clumsy old-fashioned gun. Then came groups of mandarins, their hats surmounted with the button which indicated their rank, holding fans, and as the General passed saluting him in Chinese fashion, raising both hands to the forehead in supplicating attitude, holding them an instant, and bringing them down with a rotatory gesture. Wherever the street was intersected with other streets, the crowd became so dense that additional troops were required to hold it in place, and at various points the Chinese salute of three guns was fired. The road to the viceregal palace was three miles, and as the pace of the coolie who carries your chair is a slow one, and especially slow on days of multitudes and pageantry, we were over an hour in our journey, and for this hour we journeyed through a sea of faces,—a hushed and silent sea. It was estimated that there were two hundred thousand people who witnessed General Grant's visit to the Viceroy. But no massing together of figures, although you ascend into the hundreds of thousands, will give you an idea of the multitude. Our march was a slow one. There were frequent pauses. You leaned back in your chair, holding the crushed opera-hat in your hand, fanning

yourself with it, for the heat was oppressive, and there never seemed to have been a breeze in Canton. You felt for the poor coolies, who grunted and sweated under the load, and threw off their dripping garments only to excite your compassion as you saw the red ridges made by the bamboo poles on their shoulders. You studied the crowd which glared upon you—glared with intense and curious eyes. You studied the strange faces that slowly rolled past you in review, so unlike the faces at home, with nothing of the varying expressions of home faces—smooth, tawny, with shaven head and dark inquiring eyes.

The general impression of this Chinese multitude, of the thousands of faces that passed before us that steaming afternoon, was that of high intellectual power. You miss the strength, the purpose, the rugged mastering quality which strikes you in a throng of Germans or Englishmen. You miss the buoyant cheerfulness, sometimes rough and noisy, which marks a European crowd. The repose was unnatural. Our mobs have life, animation; and a crowd in Trafalgar Square or Central Park will become picturesque and animated. In Canton the mob might have been statues as inanimate as the gilded statues in the Temple of the Five Hundred Gods. This repose, this silence, this wondering inquiring gaze, without a touch of enthusiasm, became almost painful. A rush, a scramble, a cheer would have been a relief, but all was hush and silence. There were faces you now and then picked out in the throng that were startling in their beauty. You rarely saw a bearded man, which gave the crowd an expression of effeminacy, as though it were pliant and yielding. The old men wore thin, white moustaches, and a straggling, dragging beard.

There were a few women, and these mostly hard-fea-

tured. Now and then you saw a young, maidenly face, hanging on, as it were, to the fringe of the crowd, in a shrinking attitude. Children crouched in corners, staring in an alarmed fashion, or dangling timidly and shyly from their parents' shoulders. The young men, especially those of rank, were handsome, and looked upon the barbarian with a supercilious air of contempt in their expression, very much as our young men in New York would regard Sitting Bull or Red Cloud from a club window as the Indian chiefs went in procession along a street in New York. As a matter of fact, I suppose they looked upon General Grant and his party as some of us would regard Red Cloud and his braves. We were foreigners, outside barbarians, and if we came at all to a viceregal palace—if we were received with music and the firing of cannon, and the beating of drums—it was because the Viceroy was in a gracious mood and deigned to give the barbarian a sight of oriental power and imperial Chinese splendour.

J. RUSSELL YOUNG.<sup>1</sup>

**spec'-ta-cle**, scene. (L. *spectāre*, to behold.)

**tur'-bu-lent**, restless; disturbed. (L. *turbāre*, to disturb.)

**in'-di-cat-ed**, showed. (L. *indicāre*, to show.)

**in-ter-sect'-ed**, cut across. (L. *inter*,

between; *secāre*, to cut.)

**vice-re'-gal**, belonging to the Viceroy.

**pag'-eant-ry**, splendid show or display.

**in-an'-i-mate**, lifeless. (L. *in*, not; *anima*, breath.)

1. **Mandarin**, a Chinese magistrate or governor.

2. **Coolie**, an East Indian porter or carrier.

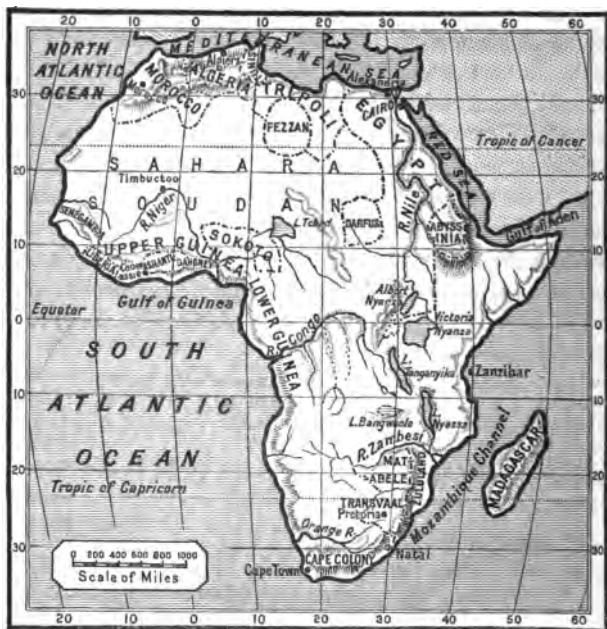
3. **Trafalgar Square**, in London; **Central Park**, in New York.

<sup>1</sup> From 'Round the World with General Grant.'

## AFRICA.

## 29.—POSITION, SHAPE, AND BUILD.

1. **Position.**—Africa is the great south-western peninsula of the Old World. It is joined to Asia by the



Map of Africa.

Isthmus of Suez; and, since the cutting of the great Suez Canal, Africa may now be regarded as a very large island. The **Mediterranean** separates it from Europe;

and the **Atlantic** from South America. It is worthy of note that the prominences of South America fit almost exactly into the indented bends of the African coast. On the east, its shores are washed by the waters of the long gulf called the **Red Sea** and the mighty **Indian Ocean**.

2. **Size**.—Africa, which contains nearly 12 millions of square miles, is more than three times as large as Europe. Its most northerly point is **Ray-el-Kerem**, which lies opposite the island of Sicily; its most southerly point is **Cape Agulhas**—a Portuguese word which means “The Needles.” Between these two points a straight line would measure about 5000 miles. Between **Cape Verd**, on the west, and **Cape Guardafui**, the eastern extremity, is a line of about 4600 miles in length.

3. **Shape**.—The shape of Africa is extremely simple. No other continent has an outline so rounded, so compact, so little irregular and straggling. The contrast between the broken shores of Europe—with its long limbs that run out into the sea, its long arms of the sea that run into the land, and the massive simplicity of the African coast—is very striking. Neither capes, nor gulfs, nor groups of islands lend any kind of diversity to the perpetual sameness of the African shores. The only large island that belongs to it is **Madagascar**; but Madagascar is separated from it by a sea about three hundred miles wide,—a sea swept by storms, and dangerous from its rapid and ill-known currents. The other islands which are supposed to belong to Africa are the **Canaries**; the **Cape Verd Islands**; **Ascension**; and **St Helena**: but these lie out in the ocean, and most of them entirely out of sight of the shores of the continent.

4. **Coast-line**.—Africa has a very short coast-line in proportion to its vast size. Though its area is more





than three times as great, its coast-line is much shorter than that of Europe. The coast-line of Africa measures only 16,000 miles; that of Europe is nearly 20,000. In Africa, we find that 700 square miles of surface have one mile of coast; whereas, in Europe, there is one mile of coast to every 180 square miles of surface.

**5. Build.**—By far the larger part of Africa is a vast table-land. This table-land is edged by long mountain-ranges which run all round it, at a distance, generally, of about 200 miles from the sea-coast. The ranges along the eastern coast are in general higher than those on the western. The highest table-land in Africa is the **Plateau of Abyssinia**, which has an average height of from 7000 to 8000 feet above the level of the sea. South of Abyssinia, and right under the equator, rises the mighty mass of **Mount Kenia**—with a height of 18,000 feet; and, not far south of it, there towers aloft the snow-capped mass of **Kilimandjaro**, which is more than 700 feet higher than its aspiring neighbour. South of these come the **Livingstone Mountains**; and, still farther south, the **Drakenberg Ranges**, which rise in front of the Indian Ocean like a steep black wall. . . In the west, and facing the Gulf of Guinea, we find the **Kong Mountains**, which are the edge of that part of the central table-land which forms the basin of the Niger. . . On the north, in Morocco, we

find the great **Atlas Range**, which runs on into the high Barbary plateau. . . The whole central table-land of the continent has an average height of about 3000 feet above the level of the sea. The northern part is a good deal lower than the southern.

**6. Contrasts between Africa and Europe.**—These two continents, which stand face to face with each other, present in almost every respect contrasts of the most striking character. Europe has a large number of peninsulas and of islands; Africa has hardly any. Europe has the longest coast-line of all the continents in proportion to its size; Africa has the shortest and most regular coast-line. The rivers of Europe are numerous, and, in general, navigable; Africa has, for its size, very few rivers, and only a small number of these are navigable. There are no deserts in Europe; the north of Africa is filled with a vast desert, while in the south there is a desert as large as the whole of France. The mountain-chains of Europe run through the heart of the continent; those of Africa round the coast. The limbs of Europe are large, and its trunk very small; Africa is all trunk, and has no limbs. The climate of Europe is the mildest and most temperate in the world; that of Africa is the hottest and driest.

**7. Deserts.**—Africa is the **Continent of Deserts**. It possesses two great deserts—the **Sahara**, or Sea of Sand, in the north, and the **Kalahari Desert** in the south. The Sahara stretches from the Atlantic to the valley of the Nile—a distance of about 3000 miles; and it is more than 1000 miles broad. It covers an area more than two-thirds of the size of Europe. The surface of the Sahara is not a dead level; it is rather a rolling table-land, ridged here and there with ranges of rocks, and broken by mountain-knots. An ocean of sand, crossed by sand-downs,

which look like frozen waves—"as if the billows had suddenly assumed a solid shape,"—vast tracts of sharp stones and pebbles, wide stretches of hard red or yellow clay, broad table-lands of rock, on which the sun beats with intolerable fierceness,—such is a general view of the Sahara. The eastern part of the Sahara is called the **Libyan Desert**; and it is the most desolate and barren portion of the whole. . . The **Kalahari Desert** is in about the same latitude south that the Sahara occupies in the north. It is a dry and sandy region, with no running water; and it is inhabited by wandering tribes of Bushmen—who may be regarded as the outcasts and gipsies of South Africa.

**8. Caravans.**—The desert is frequently crossed by large companies of camels and horses—which are called **caravans**. Let us suppose a caravan starting from the city of Fez, in Morocco. It is laden with red caps, scarves, and sashes, with English cloth, Venetian glass, coral, gun-powder, muskets, tobacco, sugar, and a hundred other things. The vast procession is a kind of locomotive market, or travelling store-house; for it exchanges the things it carries for the products of the oases or countries through which it makes its way. Thus it barter and buys on its way salt, which is found in the lakes of the oases, gold-dust, ostrich-feathers, gums, spices, gold-jewellery, and—last, but not least—negro slaves.

**9. Sand-storms.**—A traveller in a caravan thus describes one of these storms: "The day is bright and clear; the sun is high in the heavens; and the caravan goes merrily on. Suddenly a black cloud is seen on the horizon. It grows and spreads with terrible rapidity, and soon covers half the open sky. Strong puffs and gusts of wind come in front of the main body of the storm, hit the ground sharply, and throw up volleys of

small pebbles into the faces of the travellers. The whole air seems to close in like one thick black curtain drawn equally all round. The caravan stands still; and the darkness is the thick pitchy darkness that may be felt. The camels fall on their knees and groan, and lie down; the servants cower under the high sides of the camels. Nothing can be seen or distinguished; all is sand and darkness; heaven and earth seem confounded and blended into one in the deafening and blinding whirlwind of sand. The storm passes; the sun comes out again; the sky is clear; but the camels and their drivers are up to their necks in sand."

**com-pact'**, firmly put together.

**strag-gling**, with long arms running out.

**mass'-ive**, large; bulky.

**di-ver'-si-ty**, change.

**per-pet'-u-al**, everlasting.

**as-pir'-ing**, soaring high.

**as-sumed'**, taken. (L. *ad*, to; *sumere*, to take.)

**tracts**, wide stretches of country. (L. *trahere*, to draw.)

**in-tol'-er-a-ble**, that cannot be borne. (L. *in*, not; *tolerare*, to bear.)

**out'-casts**, people outside of ordinary society.

**con-found'-ed**, thrown into a confused mass.

1. **Sand-downs**, smooth rounded hills of sand.

2. **Venetian glass**. Venice was long famous for its glass-making. Some of the finest kinds of coloured glass were made there.

3. **Coral**, a hard substance of various colours which is built up in the sea by very small animals.

## KILIMANDJARO.

Hail to thee, monarch of African mountains,

Remote, inaccessible, silent, and lone,—

Who, from the heart of the tropical fervours,

Lifest to heaven thine alien snows,

Feeding for ever the fountains that make thee

Father of Nile and Creator of Egypt!

Floating alone, on the flood of thy making,  
Through Afric's mystery, silence, and fire,  
Lo ! in my palm, like the Eastern enchanter,  
I dip from the waters a magical mirror, 10  
And thou art revealed to my purified vision.  
I see thee, supreme in the midst of thy co-mates,  
Standing alone 'twixt the earth and the heavens,  
Heir of the sunset and herald of morn.  
There, in the gorges that widen, descending 15  
From cloud and from cold into summer eternal,  
Gather the threads of the ice-gendered fountains,—  
Gather to riotous torrents of crystal,  
And, giving each shelvy recess where they dally  
The blooms of the North and its evergreen turfage, 20  
Leap to the land of the lion and lotus !  
There in the wondering airs of the Tropics  
Shivers the Aspen, still dreaming of cold :  
There stretches the Oak, from the loftiest ledges,  
His arms to the far-away lands of his brothers, 25  
And the Pine-tree looks down on his rival, the Palm.  
Sovereign mountain, thy brothers give welcome :  
They, the baptised and the crowned of ages,  
Watch-towers of continents, altars of earth,  
Welcome thee now to their mighty assembly. 30  
Mont Blanc, in the roar of his mad avalanches,  
Hails thy accession ; superb Orizaba,  
Belted with beech and ensandalled with palm ;  
Chimborazo, the lord of the regions of noonday,—  
Mingle their sounds in magnificent chorus 35  
With greeting august from the Pillars of Heaven,  
Who, in the urns of the Indian Ganges,  
Filter the snows of their sacred dominions,  
Unmarked with a footprint, unseen but of God.

BAYARD TAYLOR.

in-ac-cēs'-si-ble, that cannot be reach-	ed. (L. <i>in</i> , not; <i>accessus</i> , a coming to.)	boling.)
fer'-vours, burning heats. (L. <i>fervens</i> ,		co'-mates, companions.
		ri'-ot-ous, noisy.
		dal'-ly, loiter; linger.

1. **Alien**, strange; foreign. Because they do not really belong to the Tropics.
2. **Father of Nile**, etc. Its snows melting form the Nile; its rocks ground down give fresh soil to Egypt.
3. **Lotus**, a tropical plant which when eaten lulls you to sleep.
4. **Orizaba**, a mountain in Mexico.
5. **Belted with beech**, etc. Beech is found growing half-way up its sides, and palms cover its base.
6. **Chimborazo**, one of the highest peaks in South America.
7. **Pillars of Heaven**, the Himalayas.

### 30.—RIVERS, LAKES, CLIMATE, AND PEOPLE.

1. **Rivers**.—Africa is worse provided with rivers than any other continent on the face of the globe. The great river of the north is the **Nile**; of the west, the **Congo**; and of the east, the **Zambesi**. But all these taken together do not give as much water to the ocean as is carried down by the South American Amazon alone. Next to these three, comes the **Niger**. . . All the great rivers of Africa rise on the inner slopes of the great rim that surrounds and forms the edge of the central table-land. A striking circumstance in regard to the great African rivers is that all of them rise near the ocean, but seem to avoid that part of the sea to which they are nearest, and take their course away from it and into another sea on the opposite side of the continent or at some distance off. The Nile turns from the Indian Ocean, and traverses more than half the length of the continent to seek the Mediterranean; the Congo and the Orange Rivers shun the Indian Ocean, cross more than half the breadth of the continent, and make their way into the Atlantic; while the Zambesi performs the same feat, but in an opposite

direction. Another striking fact about the rivers of Africa is that all of them have rapids and waterfalls in their lower courses; for they have to fall down high terraces and precipices as they leave the inner table-land for the lower plains.



Papyrus of the Nile.

**2. Lakes.**—The southern table-land of Africa contains some of the largest fresh-water lakes in the world; and this group of African lakes is second only to the mighty cluster of fresh-water oceans which are found in the east of North America. These lakes are fed from the slopes of the high ranges of mountains that stand around them;

and they are themselves the never-failing sources of the great rivers of the African continent. **Victoria Nyansa, Albert Nyansa, Tanganyika, and Nyassa**, are the four largest. The equator runs through the first two. On the southern border of the Sahara we find also **Lake Tchad**; and by way of balancing it, on the northern edge of the Kalahari stands **Lake Ngami**.

**3. Climate.**—(i) Africa is the Tropical Continent of the world. The equator divides it into two parts, which correspond to each other in many respects. By far the larger portion of the continent lies between the two tropical lines; and even those parts which lie outside have a very warm and subtropical climate. Thus Africa is the continent of summer—the winterless continent. Our birds of passage—the swallow, the cuckoo, the quail, and others—leave us during our winter, and find an eternal summer there, on the south of the Mediterranean. Winter is to be found only on the tops of the high mountains; cold only on the more elevated table-lands. The mouths of the rivers have a climate of moist heat, which is filled with foul airs and poisonous vapours, that carry fever and death to the unacclimatised European frame.

**4. Climate.**—(ii) Between the tropics the rain follows the sun. The supply of rain for the torrid zone comes from the great equatorial cloud-ring. This great cloud-ring which encircles the earth, is formed at sea by the meeting of the two great systems of trade-winds, which are laden with millions of tons of moisture collected from the oceans which they cross. This great ring of moisture which follows the sun is several hundred miles in breadth. It travels at the rate of about thirty miles a-day, and visits every place within the tropics twice a-year. As it comes and goes, it takes some months to pass over



the same place. Before its arrival, there is no rain to be seen; after its departure, there is not a drop of rain till it comes again. Hence there are in Africa two wet seasons and two dry seasons; and the great rivers are in flood at fixed periods twice in the course of every year. The highest table-lands of Africa are healthy; but the inter-

tropical seaboard is the home of rank and rotting vegetation, and of the fevers and pestilences that arise from this cause.

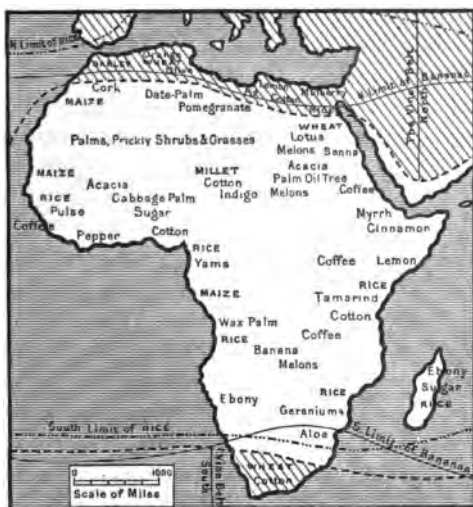
**5. Plants.**—For several hundred miles on both sides of the equator are regions of the densest forest. "Tall and massive trees, with creepers—some like cord, others as thick as the thickest hawser—extending from branch to branch, and from trunk to trunk, and so matting together the foliage overhead that a green roof is formed through which no ray can pierce"—such is a general description of the primeval forest of Africa. There is no danger of sunstroke; but the heat beneath the roof of foliage is a moist, damp, suffocating



Date-Palm.

heat. "Through the forest runs a red or yellow path, winding as a river, and joining village to village." The typical plants of the north of Africa are the date-palms; of the southern region, the tall, elegant, and full-flowered heaths. In the coast-plains, the oil-palm grows in large

numbers; and palm-oil is one of the chief articles of export from Equatorial Africa. With it are found trees which yield gum and india-rubber. Teak, rosewood, ebony, and the gigantic baobab or bread-fruit tree grow profusely in the central regions of the continent. The dry regions of the south are remarkable not only for tall and beautiful heaths, but for aloes and many odd-looking cactus-like plants.



Plant-Map of Africa.

**6. Animals.**—The animals of Africa are more remarkable for their size and savage character than for variety and number. This continent is especially the home of hoofed animals; for there are more of this kind in Africa than in any other region in the world. The tall and stately giraffe, the untamable zebra, the fleet quagga, and many kinds of antelopes, are familiar to Africa. There

are no tigers at all; but lions, panthers, jackals, and hyenas are numerous. Africa is also the home of the "thick-skinned animals." Among the largest are the elephant, the rhinoceros, and the hippopotamus or river-horse, which is sometimes also called the Nile-horse. The continent is also rich in apes; and peculiar to it are the chimpanzee, and the long-armed, vigorous, man-like, though hideous, gorilla. Crocodiles abound in almost all the rivers. The plague of Central and Southern Africa is the tsetse-fly, whose poisonous bite is fatal to horses, and sometimes also to oxen. The tall ostrich roams with long and rapid strides over the hot, sandy plains, sometimes at the rate of from thirty to sixty miles an hour.

7. **Men.**—The population of Africa is not correctly known; it can only be guessed at with great vagueness; but it probably does not exceed 200 millions. It is a common mistake to suppose that Africa is inhabited solely by Negroes. We must not think so. The true home of the **Negro** is the **Soudan**, a broad belt of land which stretches across the middle of the continent, south of the Sahara. In the north we find many mixed races—but chiefly **Arabs**, who have migrated from Asia. We may, indeed, call the northern part of the continent **Caucasian Africa**. The whole country south of the Soudan is peopled chiefly by the **Bantu** tribes, which include the Kaffirs, Bechuanas, Basutos, and others. The dwarfed and yellow **Hottentot**, again, belongs to a different race—a race that has dwindled in numbers, in industry, and in strength. Lowest of all comes the wretched wandering **Bushman** of the Kalahari Desert, who lives in holes and caves like a wild beast, who has no fixed abode and no property, and who has never been able to make a servant or a friend of any animal, unless

it be a stray dog, as lean, as wretched, and as anxious-looking as his own miserable self. In the Soudan, the Negro race has reached its highest stage of civilisation. Here the Negroes have founded kingdoms and built cities, formed settled governments, shown skill in tillage and in cattle-raising, proved themselves excellent weavers, and established markets, where the ivory, ostrich-feathers, horses, indigo, skins of lions and leopards, are exchanged for the blocks of salt brought from the sun-stricken Sahara.

un-ac-clim'-at-ised, not yet used to the climate.

in-ter-trop'-i-cal, within the tropics. (L. *inter*, between.)

haw'-ser, a thick rope or cable.

pri-me'-val, belonging to a very early age; natural. (L. *primus*, first;

*cæcum*, an age.)

typ'-i-cal plants, plants that may be taken as types or examples of the vegetation.

pro-fuse'-ly, very plentifully.

mi'-grate, to go from one country to another.

1. Victoria Nyanza and Albert Nyanza were called after Queen Victoria and Prince Albert.

2. Our birds of passage, birds which leave us on the coming of winter, and come again in spring.

3. Quail, a bird like a partridge, but smaller, with a short tail, and without red eyebrows and spurs.

4. Follows the sun. The rain-belt follows the sun because the two sets of trade-winds always blow to a point directly under the sun.

5. Ebony, a very hard and black kind of wood, much used in carving.

6. Aloe, a tree which grows in Africa and Asia. Its juice is used as a medicine.

7. Cactus, a plant with thick fleshy stems, covered with prickles and spines, and without leaves. It bears beautiful flowers of all colours.

8. Zebra, an animal more like the ass than the horse. Its coat is of a fine yellow colour, with black velvety stripes.

9. Quagga, an animal like a zebra in shape and colour. It is used as a beast of burden in South Africa.

10. Rhinoceros, a large thick-skinned animal found in Africa. It has one and sometimes two horns on its nose. (Gr. *rhis*, a nose; *keras*, a horn.)

11. Hippopotamus, another thick-skinned animal somewhat like the rhinoceros in shape, but without its horn. It lives along the rivers of Africa. (Gr. *hippos*, a horse; *potamos*, a river.)

12. The chimpanzees are the cleverest and most like man of all the apes. They live in societies, and build huts of branches and leaves.

13. The gorilla is the largest and most savage of all the apes. It is as large as a man, and walks on its hind legs.

## THE WHIRLWIND IN THE DESERT.

Sounds of dismay, and signs of flame,  
 The approaching hurricane proclaim.  
 'Tis death's red banner streams on high—  
 Fly to the rocks for shelter !—fly !  
 Lo ! darkening o'er the fiery skies, 5  
 The pillars of the desert rise !  
 On, in terrific grandeur wheeling,  
 A giant-host, the heavens concealing,  
 They move, like mighty genii forms,  
 Towering immense 'midst clouds and storms. 10  
 Who shall escape ?—with awful force  
 The whirlwind bears them on their course,  
 They join, they rush resistless on,  
 The landmarks of the plain are gone ;  
 The steps, the forms, from earth effaced, 15  
 Of those who trod the burning waste !  
 All whelmed, all hushed !—none left to bear  
 Sad record how they perished there !  
 No stone their tale of death shall tell,  
 The desert guards its mysteries well ; 20  
 And o'er the unfathomed sandy deep,  
 Where low their nameless relics sleep,  
 Oft shall the future pilgrim tread,  
 Nor know his steps are on the dead.

MRS HEMANS.

ge'-ni-i, spirits.

re-sist'-less, that cannot be with-  
stood.

ef-faced', blotted out.

whelmed, overwhelmed ; overcome ;  
buried.

un-fath'-omed, unmeasured.

rel'-ics, memorials ; remnants.

1. Signs of flame, the dark fiery red of the sky.

2. Pillars of the desert, pillars of sand raised by the whirlwind.

## 31.—EGYPT.

**1. What Egypt is.**—Egypt proper is that part of the Nile Valley which lies north of the Nubian Cataracts—together with the strip of land which stretches along the Red Sea and a part of the Libyan Desert. The population of Egypt proper amounts to about  $5\frac{1}{2}$  millions. But the kingdom of Egypt now subject to the Khedive, is a long narrow country, which stretches away from the Mediterranean to the equator, and includes the vast countries of Nubia and the Egyptian Soudan.

**2. The True Egypt.**—The fertile part of Egypt is a narrow green strip of land on both sides of the Nile, from one to ten miles in breadth. This true Egypt is



Map of Egypt and the Basin of the Nile.

the annual "gift of the Nile." The Nile has made and is making Egypt every year; and without the Nile there would be no Egypt—nothing but a dreary valley filled with drifting sand. From the high-lands of Abyssinia, from the Mountains of the Moon, from the table-lands on the equator, comes down every year the new Egypt—the soil on which are to be grown the new crops for the food of the Egyptian race. This soil is a very fertile black mud, brought down from Abyssinia chiefly by the **Atbara**, which is hence often called the Black Nile. This mud, which every year re-creates the country, has also formed the fertile Delta, and is raising that country—which is nearly as large as the whole of Wales—by its deposits, at the rate of about four inches every hundred years. Egypt, then, is the narrow green strip on both banks of the Lower Nile, along with the broad and fertile Delta at its mouth.

**3. The Nile.**—The Nile is one of the longest rivers in the world. It is not much less than 4000 miles long. For thousands of years its sources were unknown; and the mystery of the Nile remained unsolved by any traveller.

"Of thy forbidden head, thou sacred stream,  
Nor fiction dares to speak, nor poets dream.  
Through various nations roll thy waters down,  
By many seen, though still by all unknown;  
No land presumes to claim thee for her own."

Such was the fashion in which poets and other writers spoke of the sources of the mystic river Nile. By the labours of Speke and Grant, of Burton and Baker, of Livingstone and Stanley, we now know that the **White Nile** flows out of Victoria Nyanza and through Albert Nyanza—a lake which may be looked upon as the back-

water of the mighty stream. From Lake Dembea in Abyssinia comes down the **Blue Nile**, which joins the White Nile at Khartoum, the capital of Nubia. The only other tributary of any size is the **Atbara**. From the confluence of the Atbara to the shores of the Medi-



Map of Delta of the Nile.

terranean, a distance of 1200 miles, the Nile receives no tributary. Neither from the east nor from the west does a drop of water flow into it for this distance; and, what with the loss from evaporation under a burning sun, from absorption by the sands, and from the drawing off of water for irrigation, the Nile, unlike most other rivers, becomes smaller and smaller as it nears the sea into which it is destined to fall.

"It flows through old hushed Egypt and its sands,  
Like some grave mighty thought threading a dream."

The Nile is also the great water-way of Eastern Africa; but much of its value as a highway is destroyed by rapids



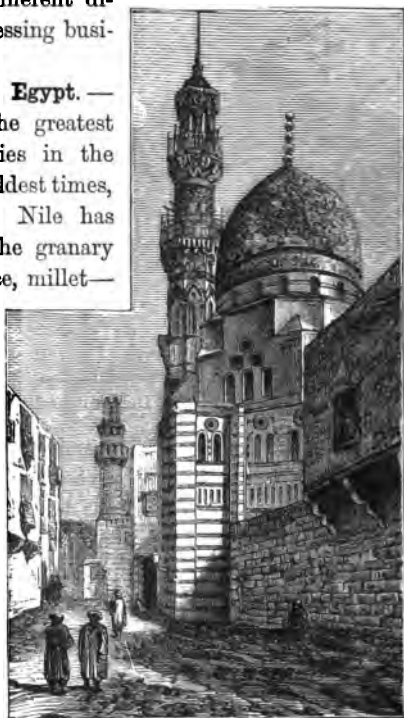
and cataracts. The river begins to rise about the end of June, and continues rising till the close of September. When the flood is at its height, the valley and the Delta look like a vast shoreless sea, dotted with towns and villages, high chimney-stalks and imposing buildings; and, as the roads are under water, countless boats are seen flitting about in different directions on the pressing business of the day.

#### 4. Products of Egypt. —

Egypt is one of the greatest agricultural countries in the world. From the oldest times, the Valley of the Nile has been known as "the granary of the East." Rice, millet—which is called *durrah*—cotton, and sugar, are largely grown. There is very little rain in Egypt; in some parts not a shower for four years.

#### 5. Great Towns.

— **Cairo**, "The Victorious," is the capital of the country; and it is also the largest city in the whole continent. It stands on the right bank of the Nile, a little above the branching-point



A Street in Cairo.

of its delta. The city contains about 350,000 people, and is hence a little smaller than Manchester. The streets are filled with a motley crowd gathered from all nations, in dresses of all fashions and colours; files of laden camels push their way through the crowd; an unceasing and deafening din fills the air—a din made up of the cries of donkey-boys, the shouts of water-carriers, street-vendors of fruit and iced drinks, and the hammering of smiths and carpenters in their open workshops. Go to the citadel and look



An Egyptian Lady.

down upon the city! It is a sea of houses, with the narrowest and most crooked streets, out of which rises a forest of tapering minarets, and the cupolas of countless mosques. . . The great seaport of Egypt is **Alexandria**, with a population of more than 210,000. . . **Port Said** is a new town, built at the northern entrance to the Suez Canal, which is now the great water-highway to India.

**re-cre-ates'**, builds up anew.

**un-solved'**, not found out.

**fic'-tion**, story-telling.

**pre-sumes'**, takes upon itself. (L. *pre*, before; *sumere*, to take.)

**con'-flu-ence**, the flowing together of

two rivers. (L. *con*, together; *fluere*, to flow.)

**ab-sorp'-tion**, the sucking in.

**des'-tined**, fated.

**im-pos'-ing**, grand-looking.

**ta'-per-ing**, running off to a point.

1. **Cataracts**, water tumbling over steep and broken rocks.
2. **Khedive**, the king of Egypt, who is tributary to Turkey.
3. **Speke, Grant, Burton, Baker, etc.**, great African explorers.
4. **Millet**, a kind of grass, the small seeds of which are used for food.
5. **Files**, single rows.
6. **Citadel**, the high central and fortified part of the town.
7. **Minaret**, a turret on a Mohammedan temple, from which the people are summoned to prayers.
8. **Cupola**, a small dome.
9. **Mosque**, a Mohammedan temple.

### 32.—THE BARBARY STATES.

1. **Morocco**.—The **Empire of Morocco** stands in the north-west of Africa. The Sultan or Emperor possesses despotic power, and is the lord of life and of death. Education—such as it is—is universal; all the inhabitants are taught to read and write; but their knowledge is limited to the Koran, and there is not a printing-press in the whole country. . . The three chief cities of Morocco are **Fez, Morocco, Mequinez**; and at each of these three the Sultan resides in turn. Fez is the largest town. The country exports leather, red caps called Fez caps, beans, maize, and olive-oil. Its chief port, on the Atlantic, is **Tangiers**.

2. **Algiers**.—**Algiers**, or **Algeria**, is a French colony, and it is nearly as large as France itself. But the population amounts to less than  $3\frac{1}{2}$  millions. About five-sixths of this population are wandering tribes; and the settled portion consists of Moors and Arabs, Turks and Jews, and those French immigrants who have left France to make Algeria their home. The climate is excellent; the products are subtropical; the landscape of the most varied character—high mountains, broad table-lands, dark forests, beautiful valleys, sandy deserts, and smiling oases.

The capital of the whole country is **Algiers**—a city of more than 50,000 inhabitants, and a famous seaport. The chief export to Great Britain is esparto-grass, out of which paper is made.

3. **Tunis**.—**Tunis** is the smallest of the four African States which lie in the north. It was, not long ago, a vassal of Turkey; it is now under the protection of France. Its ruler is called the Bey of Tunis. Its area is a little larger than that of Scotland; but its population is less than half. The inhabitants are chiefly Arabs and Berbers. The staple product of the country is olive-oil; and the horses and dromedaries raised on its plains are famous throughout the north of Africa. The capital—on the coast—is also called **Tunis**, a city of about 150,000 inhabitants; and its commerce is larger than that of any other town in Barbary. Near Tunis stand the ruins of the ancient **Carthage**—a city which, for a long time, contested with Rome the supremacy of the Mediterranean, and therefore, at that time, of the known world. Inland is the holy city of **Kairwan**—one of the sacred cities of Islam—a place which very few Europeans have ever entered, which possesses a large number of mosques, and the sacred tomb of the barber of Mohammed.

4. **Tripoli**.—**Tripoli** is a country which is still dependent on the Turkish empire. It is about four times as large as Great Britain; but its population amounts to little more than a million. The climate is very dry; there are no rivers and no rain; but there are heavy dews. The capital is **Tripoli**, which is also the largest seaport. From it are sent out large quantities of ostrich-feathers, esparto-grass, and some wheat. . . South of Tripoli is the country of **Fezzan**, the governor of which is subject to the Bey of Tripoli. The capital of Fezzan is **Mourzouk**—a city

from which large caravans set out north, south, east, and west ; north to Tripoli, south to the Soudan, east to Egypt, and west to Morocco.



des-pot'-ic, not controlled by any other power.		un-i-ver'-sal, general. lim'-it-ed, narrowed.
su-prem'-a-cy, power.		

1. **Koran'**, the Mohammedan Scriptures.
2. **Maize**, or Indian corn, is one of the principal grains of warm countries. It has a long stalk, with a cluster of large, bean-like grains at the top.
3. **Esparto-grass**, a fine fibrous grass much used in the manufacture of paper. It grows in Spain, Algeria, Tunis, and other Mediterranean countries.
4. **Vassal**, a power subject to another power.
5. The **dromedary**, or Arabian camel, has only one hump.

### 33.—THE SOUDAN AND THE WEST COAST.

1. **The Soudan.**—The **Soudan** is the name of a broad belt of fertile country which lies between the Atlantic on the west and Abyssinia on the east. It is the true home of the Negro races, and is on this account sometimes called Negroland. But, though it is inhabited chiefly by Negroes, the Arabs are the ruling race ; and they have imposed upon the Negroes their own ideas about religion,

civilisation, and social government. Nothing can be more striking than the contrast between the Sahara and the Soudan. Instead of the wearying sameness of sand, rock, and stones, on which an almost vertical sun beats pitilessly day after day, we find a diversified land of hill and dale, picturesque rising ground and fertile valley, well wooded, richly watered, with trees and plants of the most varied kind, swarming with wild animals, and showing everywhere signs of a settled and industrious people. The rich soil, fertilised by tropical rains, grows all kinds of grain; the natives spin, weave, and dye cotton, and are also cunning workers in iron and in gold. . . The whole region divides itself naturally into two districts—the country round **Lake Tchad** and the **Valley of the Niger**. **Timbuctoo**, the chief town on the Niger, has a large caravan trade. The country round it is so barren that provisions have to be brought from countries 300 miles away.

**2. Senegambia.**—The country of **Senegambia** takes its name from the two rivers, the Senegal and the Gambia, between which it lies. Three Powers hold, or rather have stations in, this vast country—the French, the British, and the Portuguese. The French hold the largest share of a region, most of which is swampy jungle. Their capital is **St Louis**, on the Senegal. The British capital is **Bathurst**, at the mouth of the Gambia, on an island which lies amidst “mud, mangrove, miasma, and malaria.” The Portuguese station is **Bissao**, at the mouth of the Rio Grande, or Great River. To these three trading stations come large numbers of Negroes, bearing from the interior palm-oil, gums, india-rubber, ground-nuts, and other products of the fertile soil.

**3. Sierra Leone.**—**Sierra Leone** means the “Range of

the Lions"—a name which the country received from its Portuguese discoverers when they heard the hideous roar of the lions from the wooded hills in its neighbourhood. It is a small British colony, so damp and unhealthy, so much out of the way of the bracing sea-breezes, that it has received the name of "the white man's grave." The capital is called **Free Town**.

4. **Liberia**.—**Liberia**, or the "Land of the Free," is the name of a small republic of Negroes, which was founded by some gentlemen from the United States. The republic is not well managed; the schools are not good; the people are very lazy. The capital of the republic is **Monrovia**—so named after an old President of the United States, President **Monro**.

5. **Guinea**.—The country called **Guinea** stretches from Liberia to the Nourse River, which falls into the Atlantic near Cape Frio. It is divided by the equator into Upper and Lower Guinea. There are in Guinea many districts and kingdoms, and many trading stations which belong to people of different European nations. The chief districts are the **Grain Coast**, the **Ivory Coast**, the **Gold Coast**, and the **Slave Coast**. The best known kingdoms are the Negro kingdoms of **Ashanti** and **Dahomey**.

6. **The Grain Coast**.—This part of the coast has not received its name from its fertility in corn or rice; but from the grains of a kind of pepper, which are called "grains of paradise." These are largely used by the natives to season their food.

7. **The Ivory Coast**.—The trade in ivory has long left this part of Africa, though the name of the coast has been retained. It was and still is under the protection of France, though she no longer sends out her soldiers to so unhealthy a region.

**8. The Gold Coast.**—The **Gold Coast** is held by the British. A long line of white breakers dashes in roaring surf day and night upon the level beach; then comes a line of dazzling white sand; then a dark tropical forest; and at the back of all, the edge of the central table-land. The capital is **Accra**, which stands on high ground and is pretty healthy; but the best known place is **Cape Coast Castle**, which is one of the most unhealthy spots on the face of the globe.

**9. The Slave Coast.**—The practice of catching and shipping slaves on this coast has been long put an end to by the British squadron; but the name remains.

**10. Ashanti.**—Behind the Gold Coast lies the little warlike Negro kingdom of the Ashantis, the capital of which is **Coomassie**. Here the Ashanti kings practise the most hideous cruelties, and doom to slaughter hundreds and thousands of innocent human beings every year. In 1874, Lord Wolseley (then Sir Garnet Wolseley) cut his way through the primeval forest, defeated the Ashanti army, took Coomassie, burnt the king's palace, seized the crown jewels and the royal umbrella, returned at once to the coast, and had put on board ship every living man in his army by twelve o'clock of the day which he had long before stated would see the end of the campaign.

**11. Dahomey.**—Next to Ashanti comes the kingdom of **Dahomey**, which has also a dark reputation for hideous human sacrifices. The capital is **Abomey**; and its chief port is **Whydah**, which sends off a great quantity of palm-oil. The king's palace, or rather, the group of royal huts, is surrounded by an earth wall—mounted with countless iron spikes, on which are fixed the bleeding heads of the royal victims.



**12. The Oil Rivers.**—The two bays known as the **Bight of Benin** and the **Bight of Biafra** are the centres of the great African trade in palm-oil. This oil, which is produced from the oil-palm, is used in large quantities to make soap, candles, and the kind of yellow grease which is employed for the wheels of railway carriages. The fruit of the oil-palm consists of huge bunches of red and yellow plums—sometimes a thousand plums in one bunch, which in some cases weighs nearly half a hundredweight. **Abo**, at the branching point of the Niger delta is in the very centre of the oil region. The navigation of the Niger is carried on by six or seven steel steamers of light draught—ships and men being armed to the teeth, so as to fight their way through the savage tribes which infest both banks. The **Old Calabar** and the **Cameroon** are generally called “the oil rivers,” from the enormous supply of oil which is brought down there to the stations on the coast. The European traders do not live on shore, but in hulks which are anchored in the river; and these hulks are large shops, where the manufactures of Europe are exchanged for palm-oil.

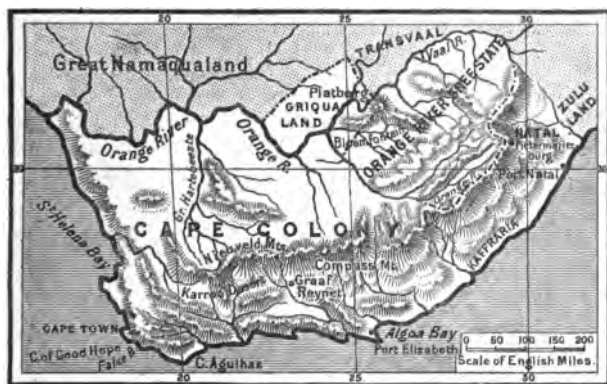
im-posed', placed upon.  
so'-cial gov'-ern-ment, the ruling of  
a people or society.  
ver'-ti-cal, straight overhead.

squad'-ron, a number of ships of war.  
pri-me'-val, original; earliest. (L.  
*primus*, first; *ævum*, an age.)  
rep-u-ta'-tion, fame.

1. **Mangrove**, a plant which grows in hot and marshy lands, and under whose branches deadly fever abounds.
2. **Miasma** and **malaria**, gases which arise from putrefying bodies or marshy places, and cause fever.
3. **Republic**, a state governed by a parliament and president appointed by the people.
4. **Bight** is a doublet of *bay*, and both mean a *bending in* of the shore.

## 34.—BRITISH SOUTH AFRICA.—I.

1. **Boundaries.**—Great Britain either holds, or, at least, has a protectorate over, the whole of South Africa, from the **Orange River** on the west, to **Limpopo** on the east, with the exception of two countries. These two countries are the **Orange River Free State**, which is an independ-



Map of British South Africa.

ent republic of Dutch Boers; and **Zululand**, which lies north of Natal, on the east coast. The wide and fertile country called the **Transvaal**—a word which means “on the other side of the Vaal”—is also a republic of Dutch Boers; but it has a British Resident, and is under the protection of Queen Victoria. The three British colonies in South Africa are **Cape Colony**, **Natal**, and **Griqualand West**. Cape Colony alone is twice as large as the British Isles.

2. **Build of South Africa.**—The great central table-

land of the continent ends in South Africa ; and the land goes slowly down to the sea in a succession of terraces. Each terrace is bounded by a chain of mountains. The chief mountain-chain of Cape Colony forms the edge of the innermost of these terraces. This chain has many names—such as Ryefield, Newfield, Snow Mountains, Storm Mountains, and others. The average height of the range is between 6000 and 7000 feet. The highest peak in Cape Colony is the **Compass Berg**, in the Snow Mountains,—a peak which reaches the height of about 8300 feet. South of this range comes a table-land called the **Great Karoo**—a wide plain nearly two-thirds of the size of Scotland. The river-beds which cross this plain are dry for nine months in the year ; but a few days after a fall of rain, the innumerable bulbous plants rooted in the hard soil begin to spring up, a smiling garden of flowers appears, and the brown dusty flats are transformed into meadows of waving grass and flowers for hundreds of miles. On the east are parallel ranges of high mountains—facing the Indian Ocean—called the **Drakenberg Mountains**, which run from Cape Town to the river Limpopo. The highest point is **Cathkin Peak**, which rises to the height of 10,735 feet—that is, about two-thirds of the height of Mont Blanc. The range divides the hardy, tall, vigorous, and brave Kaffir races from the feeble, cunning, and good-natured Bechuanas of the interior.

**3. Rivers of South Africa.** — The rivers of South Africa are in general of little use for navigation. The largest river is the **Orange** or **Gariep**. Its chief tributary is the **Vaal** ; but rapids, falls, and a varying supply of water make both of little service to the purposes of commerce. . . Olifant's (that is, Elephant's) River is a Nile on a small scale. It overflows its banks in the rainy sea-

son, and spreads a layer of fertilising soil upon the land on either bank. Most of the other streams are simply mountain-torrents.

**4. Climate.**—The climate of the Cape is wonderfully healthy. The air is dry, buoyant, inspiring, and uplifting; and the atmosphere is so clear that every line and feature of the distant landscape stands out sharply and plainly. The prevailing winds are the north-west and the south-east. The north-west is a warm wind; the south-east, which is a cold wind, and is known at Cape Town as "The Doctor," is accompanied by a remarkable phenomenon called the "Table Cloth." This wind comes from the ocean laden with moisture, is driven up the sides of Table Mountain to the top, finds there a cold stratum of the atmosphere, and its moisture is condensed into



Table Mountain.

a cloud of purest white, masses of which hang down the sides of Table Mountain as a table-cloth over a table.

**5. Vegetation.**—There are extensive forests along the south-east coast; but in other parts of the country there is little timber. The Cape heaths have a world-wide fame; and more than 400 different kinds are known. In the months of September and October—which, in the southern hemisphere, correspond to our months of March

and April—the ground is so gay with millions of brightly coloured flowers, that they have been compared to “showers of gaudy butterflies.” Hooked thorns and prickles are the mark of many South African plants; and there is one which, from its powers of detaining the traveller, has been well called by the Dutch “Wait-a-bit!” . . The chief crops are wheat, oats, and maize. All kinds of fruit thrive—such as apples, pears, oranges, peaches, apricots, almonds, and even bananas.

**pro-tee'-tor-ate**, authority assumed by a stronger power over a weaker.  
**in-nu'-mer-able**, that cannot be numbered.  
**vig'-or-ous**, strong; full of life.

**buoy'-ant**, light; causing high spirits.  
**phe-nom'-en-on**, some curious or unusual thing which happens.  
**stra'-tum**, layer.  
**gaud'-y**, gaily coloured.

1. Boer is a Dutch word, the same as the English *boor* = a husbandman.
2. Bulbous plants, plants with a large bulb growing in the earth. An onion is a bulbous plant.
3. Fertilising soil, deposits of rich soil in which good crops grow.
4. The banana is a small tree, but it is one of the most important in hot countries. Its fruit is eaten cooked or raw; the young shoots are eaten as a vegetable, and the fibres of the leaves are used for making cloth. A piece of ground, sufficient when planted with wheat for the support of one man, would, if planted with bananas, support twenty-five men.

### 35.—BRITISH SOUTH AFRICA.—II.

**1. Products.**—The most important industry of Cape Colony is the rearing of sheep; and the export of wool is by far the largest export from Cape Town. It is, in fact, equal to two-thirds of all the other exports put together. The wool sold to Great Britain alone reaches the high value of three millions a-year. Next in value to wool comes the export of ostrich-feathers, of which we purchase every

year to the value of nearly one million. . . One of the chief kinds of wealth in the colony is cattle. In addition to the ten millions of sheep possessed by the farmers, there are about three-quarters of a million of oxen. Oxen are the chief means of transport. The waggons of the colonists are drawn by from eight to ten oxen in each ; and, when crossing a range of mountains, as many as thirty or forty are yoked to a single waggon. One of the strangest, and yet most lucrative, kinds of industry in the colony is ostrich-breeding. It was both cruel and expensive to hunt and kill the ostrich for his feathers. The idea struck an ingenious person one day, "Why should we not tame and breed our ostriches? Why should we not have ostrich-farms, where we can feed them, and cut off their feathers when we want them?" The idea was quickly carried out ; and now there are many such farms in the colony. The Cape farmer buys and sells ostriches as he does sheep ; he fences them in, stables them, grows crops for them, watches their health and their habits, and cuts their feathers at the right times—"all as a matter of business."

**2. Diamonds.**—In the year 1867 a large diamond was found in Griqualand West ; the news spread like wildfire through the length and breadth of the colony ; and multitudes of fortune-hunters flocked to the favoured spot. The district received the name of the Diamond State. Quickly a town of white-canvas tents and wooden houses sprang up as if from the ground. At first the alluvial drift along the Vaal gave the largest supply of diamonds ; but soon it was found that the "dry diggings"—some of them "literally sown with diamonds"—farther inland, were the most profitable. The capital of this new State is **Kimberley**, a town second in population only to Cape

Town itself. Stone and brick houses are rapidly taking the place of wood and canvas; and social life appears to be more settled. One of the great diamonds found was named the "Star of South Africa"; and, before cutting, was sold for more than £11,000.

**3. Population.**—The population of British South Africa—including not only Cape Colony, but also Kaffir Land, Basuto Land, and Namaqua Land—amounts to more than a million and a half. The population of Cape Colony alone amounts to about three-quarters of a million. Of these, barely a quarter of a million are whites; the rest all coloured people—Kaffirs, Afrianders, and Malays.

**4. Railways and Telegraphs.**—From Cape Town, the capital of the colony, branch out three systems of railway—north, east, and west. There are now about 1500 miles of railway line in the colony. The telegraphs in the colony contain about 5000 miles of line; and the number of messages sent is over half a million a-year. Telegraphic communication between Cape Town and England was established on Christmas-day 1879; and this line is carried round the east side of the continent by way of Natal, Zanzibar, and Aden. At Aden it joins the telegraphic cable from India.

**5. Cape Town.**—The capital of Cape Colony is **Cape Town**—a city of about 50,000 inhabitants—and therefore not quite so large as Bath. Broad and open streets, handsome buildings, a university, an art gallery, botanic gardens, gas, railways, and tramways,—all go to prove that Cape Town is a modern and rising city. . . **Port Elizabeth**, at the eastern end of the colony, is the busiest trading-place in the whole colony—especially during the very lively season of wool-shipping.

**6. Natal.**—The little colony of Natal is a little larger than the kingdom of Greece. Spurs of wooded mountains run off from the great cliff-edge of the Drakenbergs, and spread out towards the sea like the gigantic fingers of a mighty hand. Between these flow streams which are always full of water—though they are not navigable; and on their banks and on the slopes up the sides of the hills are broad belts of rich grass-land, on which countless herds wander and graze. Sugar, coffee, and cotton are grown along the coast, but not in very large quantities. Rain falls in all the months; and, though Natal is in the same latitude south as Egypt is north, the heat in summer is never overpowering, and the winters are healthy and delightful. . . Wool is the chief product and export of the colony; then a little sugar, and a very little cotton. The capital is **Pietermaritzburg**, which is connected by an omnibus road and a railway with **Port Natal** or **Durban**—the seaport of the colony.

**7. The Transvaal.**—The **Transvaal** is a vast inland region of wide tracts of grass-country—well watered, and excellently suited to the raising of stock. It is now a Dutch republic under the protection of Queen Victoria. The upper part of the country is called the **High Veldt** (or High Fell); the **Middle Veldt** comes next; and, farther north and nearer the level of the sea, comes the **Low Veldt**. The **Middle Veldt** is said to be the garden of the **Transvaal**; and in the **Low Veldt** sugar, coffee, and cotton are grown. Gold of a very fine quality is also found in the **Transvaal**. By far the largest part of the country is uninhabited; and this part of Africa is “the sportsman’s paradise.”



<b>in'-dus-try</b> , means of employment.	gain.)
<b>trans'-port</b> , the carrying across of goods from one place to another. ( <i>L. trans</i> , across; <i>portāre</i> , to carry.)	<b>in-ge'-ni-ous</b> , clever; inventive. <b>gi-gan'-tic</b> , very large; giant-like. ( <i>Gr. gigas</i> , a giant.)
<b>lu'-cra-tive</b> , paying well. ( <i>L. lucrum</i> ,	<b>rais'-ing of stock</b> , rearing of cattle.

1. **Griqualand West**, in the north-west of Cape Colony.
2. **Wildfire**, Will-o'-the-wisp—kindled gas which is seen over marshy places, and which moves quickly about.
3. **Alluvial drift**, earth brought down by rivers from the mountain-side.
4. **Cable**, the thick rope of wire and gutta-percha inside which the telegraph wire for passing under water is enclosed.
5. **Botanic gardens**, gardens where flowers are grown and cultivated.
6. **Sportaman's paradise**, because there are no game laws, and there is plenty of hunting to be had.

### 36.—EASTERN AFRICA.

1. **Orange Free State**.—This republic of Dutch Boers, which is quite independent, takes its name from the Orange River. Most of it lies at the height of about 5000 feet above the level of the sea, and the winters are severe; while the high ranges of mountains which rise between it and the sea keep from it sufficient supplies of rain. Hence droughts are frequent. Corn and cattle are the chief sources of wealth; but the land is also rich in minerals, and diamonds are also found in various places. The capital of the State is **Bloemfontein**.

2. **Kaffir Kingdoms**.—There are in South Africa a number of native kingdoms, with which the British Government is now and then obliged to have more or less to do. The best known is **Zulu Land**, which is a wide coast country lying between Natal, Transvaal, and the Portuguese territory. In 1879 we went to war with the king of this country, Cetywayo (*Ketchwayo*). At first he was successful; and his army surrounded a division of the British forces at Isandhlwana, and cut every man to pieces.

His power, however, was utterly broken at the battle of **Ulundi**. Soon after, the king was captured, and sent over to England. After being shown the wonders of London, the great ships in the docks, the men-of-war, the great guns at Woolwich, the power and resources of the British Government, he was sent back to his own country with the advice to cultivate the arts of peace. But, since his return, he had a troubled time of it; and the other chiefs constantly made war upon him. He died in February 1884.



An African Hut.

**3. The Zambesi Basin.**—The Zambesi is the largest of all the African rivers that flow into the Indian Ocean. Like most of the other African rivers, the Zambesi is not well suited for navigation. Narrows, rapids, cataracts, and waterfalls obstruct its progress. The greatest waterfall—and it is one of the largest in the world—is the **Victoria Falls**, where the river, a mile broad and very

deep, throws its waters over a precipice more than 100 feet in height. The native name for the falls is a word that means "Sounding smoke."

4. **Zanzibar.**—The country called **Zanzibar**, on the east coast of Africa, is under the rule of a sultan, who is in alliance with, and is assisted by, the British Government. The Zanzibar territories bring forth in large quantities all kinds of tropical produce; but the chief exports are gum, cloves, and ivory. The Sultan has lately agreed to do all in his power to put down the traffic in slaves on the east coast.

5. **Abyssinia.**—The country called **Abyssinia** is the most elevated part of the whole continent. It has been justly called the "Switzerland of Africa." Much of the table-land of which the country consists is about 8000 feet above the level of the sea; and **Ras Dashan**, the highest known point in the country, towers to the height of 15,160 feet above the level of the sea. So steep are its mountain-sides, and so high its precipices, that a British soldier remarked, when marching on the expedition against King Theodore in 1868, "If this is a table-land, we are surely climbing up one of the legs of the table." . . Abyssinia contributes to the Nile its two great tributaries—the Blue Nile and the Atbara. . . The capital of the country is **Gondar**, a city with not more than 6000 inhabitants.

6. **Madagascar.**—The only large and important island connected with Africa is **Madagascar**. It is said to be twice as large as the British Isles. The island is a kind of Africa in miniature. A central table-land, from which rise lofty domes and rugged peaks; a low plain round the coast,—such is the simple build of Madagascar. The side facing Africa receives little rain, and is therefore dry and

barren; the side facing the ocean is copiously watered, swampy, fertile, and unhealthy. . . Rice is the chief food of the natives. A remarkable plant is the tree called the "traveller's tree." It is a kind of banana; but it spreads out its leaves straight on opposite sides, so that it looks like a very large fan. Pure sweet water, even in the driest season, is always to be found at the base of the leaf-stalks, sometimes as much as a quart, or even more. . . The capital of the island is *Tananarivo*—a city of more than 100,000 inhabitants, and therefore nearly as large as Brighton.

droughts, dry seasons.

ob-struct', block up; hinder. (L. *ob*,

in the way of; *struere*, to build.)

in al-l'-ance with, bound by treaty

to; on friendly terms with.

con-trib'-utes, gives as tribute.

in min'-i-a-ture, on a small scale.

1. *Switzerland of Africa*. It is the most mountainous country of Africa.

2. *Expedition of 1863*. This was an expedition undertaken by the British under Lord Napier to rescue some Englishmen whom King Theodore had unjustly imprisoned.

### 37.—FROM LAKE NYASSA TO ZANZIBAR.

We landed at Malisaka, a village of the Wachungu. The chief visited us and obtained a good present, in return for which he promised to supply us with men. But men were difficult to procure: they professed to be warriors, and would not carry; that was a woman's duty. Besides, they did not know the use of cloth, and did not want it. However, we at last made a start with about fifty men. I was ill, and had to follow later in the day, carried in a hammock. Our route crossed the Chombaka river, on the banks of which I spent my first night almost

alone, having failed to catch up the main party. This I did, however, the next day, and found that every one of the carriers had disappeared in the night, having been prepaid for the journey of five days. The whole of this country is covered with groves of banana. I must have sometimes passed through at least five miles of them at a stretch.

The appearance of white men in the country produced a good deal of excitement and considerable terror in some cases. Cattle abound, and were easily procured, as also sour milk and bananas, which form the principal food of the Wachungu. Their huts are circular, and beautifully built with bamboo, or wood and oval bricks of sun-burnt clay. They have very pointed, neatly thatched roofs, and the walls slope outwards, giving the hut the appearance of a beehive. The slopes of the hills near Nyassa are extensively cultivated, the beauty and fertility of the whole country far surpassing anything that I have seen elsewhere in Africa. We had been gradually ascending since we left Nyassa, and the cool mountain air was most refreshing. The grassy slopes, rushing streams, the herds of cattle with their tinkling bells, the wild-flowers—forget-me-nots, buttercups, heaths, and many old familiar friends—made it like a dream of Switzerland.

All the upper ridges of the hills were infested by robbers, who collected in considerable numbers on the heights, armed with great bundles of spears, to gaze at us. On one occasion, about two hundred of these brigands came down upon one of our party who was wandering almost alone some distance from the camp; but a bold demeanour and a display of guns kept them from actually attacking him, though they approached disagreeably near.

At Mazotes all our carriers deserted us, and we were left high and dry on the top of a mountain-ridge (6000 feet). The chief was ill with smallpox, and though he sent us a cow, he would not procure men for us—or rather, men would not be procured. For some days we encamped there, enjoying the magnificent scenery and the highland breezes; but at last it was decided that some of us must push on to Mérére's town, which was said to be about two days to the north. So Captain Elton, I, and another started off with about five of our own men and a guide, taking nothing but blankets, guns, and a small stock of food. Ascending a steep ridge, through forests of gigantic bamboos, we crossed the Livingstone range by a pass 8800 feet above the sea, and found ourselves on a great plateau 7000 feet high—a splendid cattle country, watered by many streams, among which the largest is the Uwanji river.

On this edge of the Uwanji table-land we were detained, for our guides refused to proceed on account of the wild tribes, who were ravaging the country between us and Mérére's; and indeed we saw large bodies of the enemy spreading themselves over the plain, while the smoke of burning villages rose from various parts. At an outpost of Mérére's warriors, perched on a rocky knoll, we waited for some hours; but at length, overcome by hunger and impatience, we descended to the plain, where we found a burning village, and helped ourselves to the half-burnt maize that was lying scattered on the ground. Hereupon a band of savages came rushing down upon us with yells, and all but our own men—and they behaved very well—took to their heels. The black warriors, when they caught sight of our white faces, and saw that we did not mean to budge, halted, performed a series of defiant

dances, and retreated. We wished to keep ourselves clear of the quarrel between these two tribes, and, though later events made it difficult, tried our best to act merely on the defensive. We waited till evening. It was a moonless night, but Venus and Jupiter were very bright, and the burning village threw a red glare over the whole country. Escorted by some sixty warriors fully armed, and with faces smeared with white pipe-clay (and most fiend-like objects they were), we silently and slowly wound our way along the base of the hills by unfrequented paths, often halting while our advance-guard went forward to make a reconnaissance, creeping along the beds of streams (what a terrible noise one's boots *would* make!), till we came to the Ruaha. Here the banks were very steep, and it was with great difficulty that we crossed without alarming the enemy, whom we could plainly see and hear as they sat round their camp-fires. At length we found ourselves outside a strong stockade, and after a long parley, carried on in whispers, were admitted into Mérére's "boma." We fancied that this was Mérére's town, but found that it was merely a stockade, built on the bend of the river, about one hundred yards in diameter, closely packed with miserable little grass huts. The place was in a horrible state of filth, and its odours, together with that from the numbers of unburied corpses lying outside, were almost unbearable. From the crows'-nests next morning, we saw the long line of trenches and camps with which the place was surrounded. There must have been at least three thousand of the besiegers, and we numbered about six hundred, besides women and children. At first they were very bold, and made various assaults on the stockade, in which they lost many men. Then, in despair of

taking the place, they had dug trenches, formed camps, and evidently meant to starve us out.

About four o'clock every morning there was generally an alarm or an attack, and I used to find myself rushing down, rifle and revolver in hand, to the stockade, generally to find the affair all over and the enemy repulsed with loss. All day long bullets used to be flying about; but not much damage was done to us, although I generally had a good many patients to visit. The constant drumming, the yells of the outposts jeering at the enemy, and imitating the cries of cows, sheep, and goats (to make the besiegers believe we still had such animals in the stockade), kept one awake at night, and the horrible smells and hunger made us begin to think of attempting a sally; but Suleiman and Mérére begged us to wait a few more days, declaring that forces were being collected to relieve us. Things had come to a bad pass, when, before dawn on the 5th of November, we were as usual called up by our men, and, as was our wont, snatched up our guns, and hurried down to the stockade. But instead of an excited throng of warriors, brandishing spears and letting off their firelocks into the darkness, we found a crowd of men, women, and children gazing at long lines of burning huts blazing in all directions. It was the most glorious 5th of November bonfire. The enemy having heard of the approach of the tribe who were advancing to our relief, had fired all their camps, and were in full retreat. Mérére still, however, suspected a feint, and ordered his men to remain within the stockade. But we did not agree with him, for we saw the vultures swooping down on the trenches, and stalking about the deserted camps, so Elton and I walked out, he with a shot-gun, in the hope of bagging a dove for breakfast, and I with no gun at all. We found the

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camp and trenches deserted, and the whole ground strewn with skeletons and corpses. Then the whole population of the "boma" poured out.

At length we most gladly said farewell to Mérére, and started off towards the north-west. While we were still on the great plain of Usango, game was plentiful, and we were very fortunate in bagging a good deal; but when we reached the Niam-Niam country, we found it completely deserted, all the people and cattle having taken refuge in the mountains of Usafa. Then came a few days—about six—of pretty nearly famine fare. I remember my intense joy when I managed to shoot a couple of parrots with one of our last cartridges; and on the day before reaching the village, I know I was in a very faint and staggering condition, and would never have got through had not poor Elton shared with me a mud-fish that was caught by one of the men, and purchased at a high price. I have never tasted anything half so delicious as the flesh, skin, bones, and tail (I had the tail-end) of that mud-fish. In the evening I came across a wild fig-tree, and made a good meal off the unripe fruit. The rest of the party had pushed ahead, and arrived at Mkongora's; but I was benighted, and spent a miserably wet night in the bush, and was carried in by my men next day. . . .

Crossing the Makasumbi river we found ourselves in an undulating country covered with thick bush. Here poor Captain Elton began to break down. We carried him for two days, and when we reached the Kasigo he became worse. But we thought it best to push on, for the rain was violent at nights, and our food was finished. Here, after remaining unconscious for fifty hours, our poor fellow-traveller breathed his last. We buried him—though

not without encountering much difficulty from the superstitions of the natives—under a large baobab-tree, about three miles to the S.E. of the village. After this sad event we most fortunately discovered that a numerous caravan was encamped at North Usekhe, and were hospitably received by the chief Arab, Haram Selim-Selim, who provided us with cloth (at, however, rather a ruinous price), and gave us presents of coffee, sugar, and curry, which were, as might be supposed, most acceptable.

We then had to traverse some 350 miles of the Ujiji caravan route, about which it will be enough to say that we could scarcely procure food enough, though the country teems with cattle and sheep—that we had a wet time of it for two days across the Mkata swamp, finding the water waist-high in many parts, and chin-high in others—that we passed eight terribly anxious days, while one of our party lay between life and death with an attack of sunstroke—and that we were nearly mad with joy when “the sea, the sea” first burst upon our view—and finally, that on our arrival at Bangamoyo we found H.M.S. Vulture awaiting us, and on the last day of February we reached Zanzibar, having spent four months and a half on the journey of about 1000 miles from Livingstonia.

H. B. COTTERILL.<sup>1</sup>

*de-mean'-our*, bearing; appearance.

*to make a re-con-nais'-ance*, to discover the position of the enemy or

the lie of the land.

*sal'-ly*, a going-out to attack the enemy.

1. *Stockade*, a strong railing of logs for the defence of a house or town.

<sup>1</sup> From the ‘Proceedings of Royal Geographical Society.’

## 38.—MARCH TO THE SEA.

After this day's exhibition I saw that the marching powers of my men had gone from bad to worse, and that some decisive steps must be taken, or the caravan would never reach the coast, now only one hundred and twenty-six geographical miles distant. Upwards of twenty men complained of being unable to walk far or to carry anything; swelled legs, stiff necks, aching backs, and empty stomachs being the universal cry. Taking my pipe to my assistance, I sat down for half an hour's reflection, and then resolved on the action to be taken. It came to this: throw away tent, boat, bed, and everything but instruments, journals, and books; and then, taking a few picked men, make a forced march to the coast, sending thence assistance to the main body. And this was no sooner decided than acted upon, for no time was to be lost. Manoel appropriated my abandoned tent, bed, and boat, and lodged them with a friend in a village near by; and early on the following morning I started—with five of my own men, Manoel and two of his, and the Bailunda, who said they could go at any pace—to make a rush for the coast, leaving three of Manoel's people to act as guides to the caravan.

My kit consisted of what I stood up in, and a spare shirt, a pair of slippers, a blanket, frying-pan, tin cup, sextant, and writing materials; making in all a load of about twenty pounds, which was shifted from man to man on the journey. My personal stock of food and stores for the road was composed of half the fowl obtained at Lungi, a little flour, and my last two yards of cloth.

We set out at a good speed, across rough and broken

country; but about noon the Bailunda, who had boasted about their pace, gave in, saying that they did not calculate upon going at such a rate. About three o'clock we halted at a small camp situated upon a large open upland, and made ourselves as comfortable as might be, and took advantage of the stream running at the foot of the hills to enjoy a bathe. I felt rather stiff after the sharp march, but Jumah was an adept at shampooing, and took some of the kinks out of my muscles.

The next day we rose with the lark, and I was so hungry that I could not resist finishing the remains of my fowl, although well aware I could scarcely hope for another taste of flesh between this and the coast. Leaving camp, we made a gradual ascent, and, passing through a gap, found before us a steep and almost precipitous descent, down which we went like goats, jumping from stone to stone. No sooner had we reached this valley than we had to begin the ascent of other hills, and, on arriving at their summit, found ourselves overlooking other ranges in front of us, their crests piercing the clouds which hung at our feet. Away to the south was a village, situated on a small conical mount; and this was the settlement of a colony of mulattoes. Descending again, we went through a deep gorge, with its sides clothed with trees, the graceful form and light foliage of the wild date-palm contrasting well with the darker and heavier shades of the acacias.

We were now upon a level plain, covered with open forest; and as we were about to enter the wood, I noticed a grave composed of a pile of loose blocks of granite, with a rough and massive wooden cross reared at its head. A stream running through a muddy swamp, which we reached about noon, affording an opportunity for bathing,

we halted to enjoy a dip and rest, and a bit of damper to appease our hunger. On resuming our march, we entered well-wooded but broken ground, with numerous torrents and rills, and outcrops and vast sheets of granite. From a high hill we observed ranges of mountains still lying in front, while at our feet there was a decent camping-place, where we decided to halt. Before us was the river Balomba, eighty feet wide and waist-deep, flowing fast towards the north-west, and ultimately falling into the sea as an independent stream some little distance north of Benguella.

Five o'clock the next morning saw us on the move again. Crossing the Balomba, we passed some cultivated ground and villages perched upon small rocky hills, the huts corresponding so exactly with the colour of the red sandstone rocks that I should not have noticed them but for curls of smoke rising into the morning air. On through jungle, across torrent-beds and streams, up and down we went, until we reached a level lying between two mountains. Here there was much cultivation, the bottom being very fertile, and sugar-cane, Indian corn, and tobacco grew in profusion. We endeavoured to persuade some people working in the fields to supply us with food, but they refused to enter into any commercial transactions with us.

We continued on the march until about two o'clock, when Manoel asserted that, as we were close by the village of a chief whom he knew, we must stop to obtain flour, our stock being wellnigh exhausted. We succeeded in getting a small quantity of flour, and the chief brought me as a present a little Indian corn and a gourd of the sourest *bombé* possible. He expressed regret at not having heard of my intended visit, as he would then have

given me something respectable, but now he had nothing prepared. Marching on again, and passing some huge blocks of granite, we reached more level ground, well wooded and watered. We overtook two down-caravans, and even managed to pass them, after a considerable amount of racing, for they did not at all appreciate being beaten by a white man upon their own ground. Just before sunset we found ourselves amidst a swarm of locusts on the point of settling, and my people were anxious to collect them; but camp was still some distance ahead, and I knew we were much too tired and weary to make another start that night if once we halted.

I was almost dead-beat by this day's work; for, including all halts, we had been travelling for thirteen hours over rough and difficult country. But I knew that the first signs of fatigue betrayed by me would be the signal for the break-down of the whole party, so I struggled to keep up appearances. When day dawned, I saw on the other side of the plain a range of sterile-looking mountains, which we reached after two hours' marching across the broken level.

Fearfully hard work was now beginning seriously to tell on me, but I was wonderfully buoyed up by the knowledge that every step was taking me nearer to the coast and to rest. After more hours of weary clambering, we entered upon an open plain, and to my sorrow I noticed that it was surrounded by mountains, which gave promise of hard labour on the morrow. Shortly before sunset we were near a village in the small district of Kisanji, and here made our arrangements for sleeping under some baobabs, of which we had seen the first in the pass. I was so exhausted, that, when the men took the opportunity of having another bathe, it was impossible for me

to do the same, being only fit to lie under the shade of a baobab-tree.

We were off by half-past four the following morning, and soon came upon a number of up-caravans just starting on their march. Scrambling along a steep and rocky ridge of hills, intersected with several water-courses and ravines with almost perpendicular sides, and then up a path not unlike a broken-down flight of steep steps, we reached the summit of the range. What was that distant line upon the sky? We all gazed at it with a strange mingling of hope and fear, scarcely daring to believe it was the sea. But looking more intently at that streak happily left no room for doubt. It was the sea; and Xenophon and his ten thousand could not have welcomed its view more heartily when they exclaimed, "The sea! the sea!" than did I and my handful of wayworn followers.

COMMANDER CAMERON.<sup>1</sup>

ap-pro'-pri-at-ed, took charge of.  
kinks, knots from long walking.  
pro-fu'-sion, wild abundance.

trans-ac'-tions, dealings. (L *trans*,  
across; *agère*, to do.)

1. Sextant, an instrument used by surveyors for measuring angles.
2. Damper, dried and preserved meat, somewhat like *pemmican*.
3. Outcrops, ridges of rocks rising above the soil.
4. Down-caravans, that is, caravans going towards the coast.
5. Baobab, a widely spreading tree whose branches turn downwards and take root in the soil, in their turn becoming stems from which new branches may spring.
6. Xenophon, a famous Greek writer. Like most of the Greeks he was also a soldier.

<sup>1</sup> From 'Across Africa.'

## NORTH AMERICA.

## 39.—GENERAL VIEW.

1. **America.** — In 1492, Christopher Columbus, the great explorer, when sailing on a voyage in search of a new way to India, discovered a number of islands, now known as the **West Indian Islands**. Five hundred years before, however, North America had been visited by some of the wild sea-rovers of Scandinavia. They had sailed across to Greenland, and made their way as far south as the New England States; but the name *Greenland* is the only trace that remains of the discoveries of these early voyagers. In company with Columbus in his voyages to the New World was a Florentine and an astronomer, Amerigo Vespucci; after several years he wrote a book, relating his adventures, and describing the new land. This book was so widely read, and the writer's name became so associated with the new continent, that it was called after him, **America**.

2. **Points of Likeness to South America.**—The two Americas are, in many respects, very like each other. Let us glance at the points of resemblance in the physical structure of the two continents. Both seem to be built on the same plan. Both are pear-shaped,—broad in the north, and tapering away gradually to the south; both are continents, of long and lofty mountain-ranges, of wide and fertile plains, and of rivers unsurpassed in size and commercial importance by any other rivers on the face of the globe. In both continents the chief mountain-ranges extend along the whole length of the continent, from





Map of North America.

north to south, and run close to the western coast; in both there is a much lower and shorter secondary range near the east or Atlantic coast. In both continents, too, the west coast is much more regular and unbroken than the east.

**3. Contrast to Europe.**—(i) If, now, we compare North America with Europe, we shall find very many points of unlikeness. In Europe, the greatest length of the continent is from east to west—and in this direction run the chief ranges of mountains; in North America, the greatest length is from north to south—and this, too, is the general direction of the mountain-chains. Europe, again, is the continent of large peninsulas and numerous clusters of islands; North America has only three small peninsulas, and only two important groups of islands—the group at the mouth of the St Lawrence, and the West Indian group. Europe has a very long coast-line in proportion to its size; North America, when compared with Europe, has no very great development of coast-line. Another very noticeable point of contrast is in the lakes. Europe is, on the whole, well supplied with lakes; but when we compare them with the vast inland fresh-water seas of North America, they become dwarfed almost into insignificance.

**4. Contrast to Europe.**—(ii) Only a very small portion of Europe lies within the Arctic Circle; much of the land in North America reaches to within  $10^{\circ}$  of the North Pole. The surface of America is vast and monotonous—lofty rugged mountains in the west; enormous grassy plains and river-valleys in the centre; and mountains, lower and less grand, in the east. Europe is everywhere diversified, everywhere new and fresh; there is always, and almost everywhere, an endless succession of moun-

tain and valley, river and plain. In America nature is, for the most part, still supreme. Endless breadths of prairie are still untenanted by man—man has not had time to subdue nature; in Europe nature is almost everywhere softened down and dominated by the presence and the labours of man. A most important point of contrast in regard to the commerce of the two countries is seen in the position of the most indented part of the coast-line. In Europe the coast-line is almost equally indented on all sides; but on the north coast, which is washed by the waters of the Arctic Ocean, and which is frozen for the greater part of the year, there is only one port. In America, the north coast is very much indented, and is lined with many islands; but these indentations are useless for commerce. Two or three times has a passage been forced along the north coast of North America, but then only with the greatest difficulty and danger; and what is known as the "North-West Passage" is of no value whatever to sailing-vessels or steamers.

**5. Boundaries.**—**North America** is the most northerly of the two great continents that form the New World. On the north it is washed by the icy waters of the **Arctic Ocean**; on the west it has the mighty **Pacific Ocean**, which contains half of all the waters in the globe. On the south North America is joined on to South America by the narrow **Isthmus of Panama**; on the east it has the **Atlantic Ocean**. Long ago the two Americas were not joined by an isthmus as they are now; they were two islands separated by a narrow strait. At the north-western extremity America is separated from Asia by Behring Strait, which is, at some parts, only 36 miles in width.

**6. Size.**—The greatest length of North America is

from north to south. A line drawn in a north-westerly direction from the Isthmus of Panama to Cape Lisburne in Alaska, measures about 5600 miles. Its greatest breadth, measured from Nova Scotia to the mouth of the Columbia river, is about 3100 miles. From this the continent tapers off until at the Isthmus of Panama it is only 50 miles across. North America has, including all the islands, an area of 8,080,000 square miles—that is, it is  $2\frac{1}{2}$  times the size of Europe, and nearly 68 times the size of the British Isles. It is thus the third in size of all the continents.

**7. Shape.**—Taking North America as a whole, it is shaped like a triangle, the base being the north coast, the apex being at the Isthmus of Panama. Cutting off Greenland and the islands of the north coast, we find the rest of the continent a very compact and solid mass, the only great openings into the land being the Gulf of Mexico in the south, and Hudson Bay in the north.

**ex-plor'-er**, one who goes out in search of strange lands.

**re-lat'-ing**, telling over.

**as-so'-ci-at-ed**, connected with.

**re-sem'-blance**, likeness.

**un-sur-passed'**, not to be beaten.

**dwarfed**, made to appear very small.

**mon-ot'-on-ous**, without change in scenery.

**un-tan'-ant-ed**, not dwelt in.

**dom'-in-at-ed**, subdued; tamed down.

1. **Christopher Columbus** was a native of Genoa, and early took to a sailor's life.

2. **Florentine**, a native of Florence in Italy.

3. **Astronomer**, one who studies the science of the stars. (Gr. *astron*, a star; *nomos*, law.)

4. **Physical structure**, the way in which they are naturally formed.

5. **Prairie**, vast breadths of meadow-land. (F. *prairie*, meadow.)

6. **Behring Strait**, so called after a Danish explorer sent out by Peter the Great of Russia. He crossed Siberia, and in a small vessel sailed across to the American continent.

7. **Base**, the side upon which a triangle stands; apex, the angle opposite the base.

## 40.—COAST-LINE, ISLANDS, AND INLETS.

1. **Coast-line.**—North America is, next to Europe, the richest of all the continents in the length of its coast-line. Europe has 20,000 miles of coast, North America has 27,700 ; but North America is  $2\frac{1}{2}$  times the size of Europe. Europe, again, has one mile of coast for 192 square miles of surface ; America has one mile of coast for every 288 square miles of surface. Asia comes next in order, but it lags far behind ; it has only one mile of coast for each 500 square miles of surface. . . But, although North America has so great a development of coast-line, we must not suppose that all this coast-line is useful to commerce ; for the most indented part of the coast-line is that which lies on the Arctic Ocean, where there is no traffic at all. This part is rich in small gulfs and bays ; and hundreds of islands line its shores, and extend far out into the ocean. But all these inlets are useless, or nearly useless, as regards commerce ; and a passage through them is attended with the utmost difficulty and danger, from the number of icebergs which are to be met with everywhere, and at all seasons of the year.

2. **Capes.**—The capes of North America are generally not very prominent and of no great interest. **Cape Farewell** forms the southern corner of the Danish colony of Greenland ; **Cape Race**, the eastern point of the island of Newfoundland ;—and the first sighted by steamers from Great Britain, and the point to which the first transatlantic telegraph cable was carried. **Cape Cod**, a little to the south of Boston, stands out from the extremity of its oddly shaped semicircular peninsula. On the west the best marked is **Cape St Lucas**, the southern extremity of

Lower California ; and **Cape Corrientes**, which juts out from the west coast of Mexico. Running out into the cold Arctic Sea is the bold headland of **Cape Lisburne**.

3. **Peninsulas and Isthmuses**.—The peninsulas of North America are small and few in number when we compare them with the vast size of the body of the country, or with the enormous limbs which run out from the main body of Europe. On the north-east is the cold and inhospitable **Labrador**, which is nearly surrounded by the waters of Hudson Bay, the Atlantic Ocean, and the Gulf of St Lawrence. Next to it comes **Nova Scotia**, joined to the mainland by an isthmus only eight miles across. To the south-east of the United States is the peninsula of **Florida**; and between the Gulf of Mexico and the Caribbean Sea is **Yucatan**, one of the three great peninsulas of the world that run to the north. On the west are **Lower California**, a very long and narrow peninsula which runs parallel with the west coast, and encloses the narrow Gulf of California; and further north **Alaska**, which, with the chain of islands that run off from it, separates the Pacific from the Sea of Kamtchatka. . . There are only two isthmuses of any importance—**Tehuantepec**, which separates the Gulf of Mexico from the Pacific; and the **Isthmus of Panama**, which is in one place only 20 miles across, and which joins North and South America.

4. **Islands**.—(i) America, when contrasted with Asia, will be seen to be very poor in islands. To the east of Asia are long lines of islands which run along the coast,—among others, the Japan Islands; and at the southern extremity the East Indian Archipelago, the largest and richest group in the world. America is, on the other hand, richest in islands where the islands are of least use

—in the cold and frozen Arctic Ocean. Here is a large group of islands which in warm lands would be a source of great wealth to America; but, where they are situated, they are useless. The chief island in the far north is **Greenland**, which has only a few scattered Danish settlements along its coasts. It lies almost wholly within the Arctic Circle. Further south, along the east coast, we have the group of islands at the mouth of the St Lawrence. These are **Newfoundland**—by far the largest—**Cape Breton Island**, **Prince Edward Island**, and **Anticosti**. The **Bermuda Islands**, a small group which belongs to Britain, lie 600 miles east of Cape Hatteras.

**5. Islands.**—(ii) Separating the Gulf of Mexico and the Caribbean Sea from the Pacific and from the Atlantic is the richest of the North American groups of islands—the **West Indies**—first discovered by Columbus in 1492—**Cuba**, **Jamaica**, **Haiti**, and **Porto Rico**. To the north is the **Bahama** group, a long chain of small but rich islands. Off the west coast of North America there are no very rich or important islands. **Vancouver Island**, which forms part of British Columbia, has rich coal-mines. A little to the north is **Queen Charlotte Island**, which also belongs to British Columbia. **Prince of Wales Island** belongs to Alaska,—a wide district of country, which was in 1847 purchased from Russia by the United States.

**6. Inland Seas, Bays, Gulfs, and Straits.**—(i) The east coast of America is much more irregular and broken up by inlets and arms of the sea than the west coast, and North America has on this side a much greater number of large openings than South America. It is thus on the north and east of North America that we must look for the largest bays and gulfs. **Baffin Bay** is not really a bay, but

a wide channel. It is shut in between Greenland and the numerous islands to the west. It is open for ships from June to September; but at other times it is so crowded with enormous icebergs, floating slowly to the south, that sailing in it is attended with the greatest danger. It is entered from the Atlantic by **Davis Strait**. **Hudson Bay** may rather be regarded as a great inland sea than as a bay. It is surrounded on three sides by the mainland, and the fourth side is blocked up by numerous islands. Navigation in it is attended by many dangers, as well from the ice with which it is crowded as from the reefs and shoals which line its coasts. Hudson Bay is entered from the Atlantic by **Hudson Strait**,—an important entrance, which is from 80 to 100 miles wide. The **Gulf of St Lawrence**, into which the river St Lawrence pours its waters, is rendered especially dangerous to navigation by the fogs which are frequent upon its waters. In winter it is crowded with large ice-fields, hummocks, and icebergs, which are all almost equally dangerous to shipping.

7. **Inland Seas, Bays, Gulfs, and Straits.**—(ii) The **Bay of Fundy**, which runs up between Nova Scotia and the mainland, is chiefly remarkable for the height of its tides. Sometimes the spring-tides rush up the bay in an almost perpendicular wave 70 feet high. The **Gulf of Mexico** and the **Caribbean Sea** are shut off from the Atlantic by the West Indian Islands. The shores of the Gulf of Mexico are low and sandy, and are lined by numerous flat islands. This gulf is entered from the Atlantic by **Florida Strait**, and is joined to the Caribbean Sea by **Yucatan Channel**. The only opening of any importance on the west is the **Gulf of California**, which runs up for about 700 miles between the moun-



tainous peninsula of Lower California and the mainland. This long and narrow gulf possessed at one time a very large and valuable pearl-fishery. **Behring Strait** separates America from Asia, and is at its narrowest part only 36 miles across. The openings and straits between the mainland and islands of the Arctic Ocean are of no importance; they are blocked with ice for the greater part of the year.

ut'-most (*out-most*), very greatest.  
trans-at-lan'-tic, across the Atlantic.  
(*L. trans*, across.)  
semi-cir'-cu-lar, forming half a circle.

in-hos'-pit-able, cheerless and unfriendly.  
re-gard'-ed, looked upon.  
val'-u-a-ble, of great value; precious.

1. **Three great peninsulas.** These are Yucatan, Cape York (in Australia), and Jutland.
2. **Reefs,** lines of rocks, often hidden by the sea.
3. **Shoals,** shallow places; sand-banks.
4. **Icebergs,** ice-mountains—that is, large bodies of ice floating about in the sea.
5. **Spring-tides.** These are the highest tides; **neap-tides** are the lowest.
6. **Caribbean Sea,** called so after a race of savages—the Caribs—who inhabited those coasts. They are now extinct.
7. **Pearl-fishery.** Pearls are found inside the shells of the pearl-oyster.

#### 41.—BUILD.

1. **What North America is.**—North America is the land of wide and lofty mountain-ranges; of vast and boundless plains, through which magnificent rivers wind, on their way to the sea; but more especially is it the land of enormous fresh-water basins. In no other continent is there anything at all to be compared to the splendid chain of lakes which lie in the upper course of the St Lawrence river; and if we except the large inland salt-

water lake, the **Caspian**, we shall find nowhere else inland bodies of water that at all approach them in size.

**2. Build of North America.**—The build of North America is one of the simplest of all the continents,—nearly as simple as that of South America. On the west coast, and stretching parallel with it, runs a double chain of mountains, supporting high table-lands between them. This chain extends along the whole length of the continent, from Alaska in the extreme north, until it loses itself in the Cordilleras and lofty table-lands of Mexico. Near the east coast runs another, but much lower and less important, range of mountains; while between these two ranges lies the wide, and for the most part fertile, plain of the Mississippi in the south. All these features are on a grand scale, and run throughout the whole length of the continent from north to south. A short, abrupt, and rocky slope to the Pacific; a region of mountain and lofty table-land, in some parts covering a breadth of 1000 miles; a vast stretch of rolling prairie-land and river-valley; a second range of mountains, lower and less grand; and a short slope to the Atlantic,—such is the simple and striking build of North America.

**3. Contrasts in the Build of the Old and New Worlds.**—There are some very interesting points to be noticed in the comparison and contrast of the builds of the continents in the Old World with those in the New. In Asia, for example, the whole centre of the continent is occupied by high and vast table-lands, flanked on either side by mountains, some of them the highest in the world. From these elevated central table-lands, the land slopes downwards to the sea. In North America, on the other hand, we have in the centre enormous breadths of plain, in which the rivers have room to spread out and develop;

and this plain is bounded on both sides by lofty mountains, which support between their double or triple chains high, and for the most part barren, table-lands. Asia is the continent of high central table-lands and mountains, with outlying plains and slopes; North America, the continent of vast central plains and river-valleys, bounded on both sides by mountain-chains.

**4. River-basins.**—If we were to travel to the boundary-line between the United States and the Dominion of Canada, and there to take our position about midway between the Pacific coast and the western shores of Lake Superior, we would then be standing at a point from near which all the great rivers of America rise. If we were to ascend in a balloon, we should, if our sight carried so far, see the **Missouri** and **Mississippi** flowing to the south, on their way to the Gulf of Mexico. Looking to the east, we should see the great lakes, with the **St Lawrence** carrying off their surplus waters; and the **Saskatchewan** and **Nelson** flowing into the ice-covered waters of Hudson Bay. Northwards, we should see the **Mackenzie River** bearing tribute from its numerous lakes; and the **Yukon** pouring its waters into Kamtchatka Sea. Rising above the peaks of the Rocky Mountains, we should see, on the west, the **Fraser**, **Columbia**, and **Colorado** rivers fall into the Pacific. Besides these oceanic basins, we find a pretty large continental basin, with the Great Salt Lake for its centre, which sends down no waters at all to the ocean. But this non-oceanic basin cannot for a moment be compared in size to the vast continental drainage area of Asia, which covers an area of several millions of square miles, and which has some rivers of more than 1000 miles flowing through it.

**mag-nif-i-cent**, large and grand.  
**ab-rupt**, steep and rocky. (L. *ab*,  
 from ; *ruptus*, broken.)

**a-scend'**, go up. (L. *ad*, to or up ;  
*scandere*, to climb.)  
**sur-plus**, overplus ; too much.

1. **Rolling prairie-land.** In some places the prairies seem to rise and fall in long waves.

2. **Great Salt Lake** is the highest lake in North America.

## 42.—MOUNTAINS, TABLE-LANDS, AND PLAINS.

1. **The High-lands.**—We have already seen that almost the whole of the western half of North America is occupied by double or triple ranges of mountains, which support between them high and rocky table-lands. This part of the continent, then, we may call the **Pacific High-**

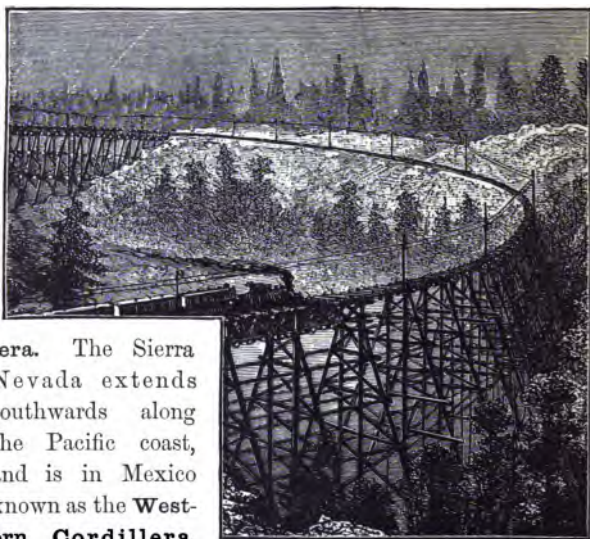


Section of North America.

**lands**, since the ranges for the most part run parallel with the Pacific, and their western slopes fall down abruptly to the ocean. In the east, again, we have a range of lower high-lands, which has different names in different parts, and which runs almost parallel with the Atlantic coast. These are called the **Atlantic High-lands**.

2. **The Pacific High-lands.**—This region consists of a high and extensive table-land traversed by several mountain-ridges, and buttressed on the east by the splendid range of the **Rocky Mountains**. On the west it is edged by several shorter and less noble ranges—the **Sierra Nevada**, the **Cascade Range**, with **Mount St**

**Elias**, 17,500 feet, the second highest peak in North America. Further north, we find the **Sea Alps**, stretching away into the cold peninsula of Alaska. Towards the south, the Rocky Mountains pass along the western margin of the basin of the Rio Grande, and passing along the eastern shores of Mexico, form the **Eastern Cordil-**



lera. The Sierra Nevada extends southwards along the Pacific coast, and is in Mexico known as the **Western Cordillera**.

Bridge on the Pacific Railway.

These gradually approach, and meet in the narrow isthmus between Mexico and Central America. Thus we have an enormous stretch of table-land and mountain, in some parts 1000 miles broad, extending from the Arctic Ocean to within  $10^{\circ}$  of the equator. In the north the high-lands are broadest, but they do not exceed 800 feet in height. From here they rise in successive waves, becoming higher and grander as they come southwards, till in Mexico the table-land

reaches an average height of 8000 feet. From here it becomes suddenly lower, till, in the Isthmus of Panama, the land at the lowest part is not more than 250 feet above the level of the sea.

**3. The Rocky Mountains.**—In the north the Rocky Mountains are only from 1000 to 2000 feet in height; but as they stretch southwards, they rise higher and higher in the air. In British Columbia there are several very high peaks. **Mount Brown**, the highest peak in the Rocky Mountains, rises to the height of nearly 16,000 feet. The Rocky Mountains form one continuous range, except in one or two places where they are cut across by deep and wide mountain-passes. One of these passes—the Vermilion Pass—occurs near the southern boundary of British Columbia, at a height of about 5000 feet. Two more chief passes cut the range in the United States. These passes—so useful for the making of railways—are for the most part broad and desert plain, and not narrow rocky defiles—such as we see in the Old World.

**4. The "Golden Valley."**—Westward from the Cascade and Sierra Nevada ranges is a lower range of mountains, known as the **Coast Range**. From it the mountains go down in steep and abrupt terraces to the Pacific Ocean. Between the Coast Range and the Sierra Nevada is enclosed the wonderful valley of the Sacramento and San Joaquin rivers, called the "Golden Valley," where the rich gold-beds of California lie. The whole valley is a panorama of some of the grandest scenery in the world; but the scenery of the greater part seems almost tame when compared with the awful grandeur of the Yosemite Valley. Here is to be seen the highest waterfall in the world—a waterfall nearly half a mile in height. "It was a powerful stream," says a traveller,

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"35 feet broad, that made the plunge from the brow of the awful precipice. At the first leap it clears 1497 feet, then it tumbles down a series of steep stairways 402 feet, and then makes a jump to the meadows of 518 feet more. The three pitches are in full view, making a fall of little less than half a mile. But it is the upper and highest cataract that is most wonderful to the eye, as well as the most musical. The cliff is so sheer, that there is no break in the body of the water during the whole of its descent of more than a quarter of a mile. It pours in a curve from the summit to the basin that hoards it but a moment for the cascades that follow."

**5. The Atlantic High-lands.**—The chief part of the Atlantic High-lands is occupied by the **Alleghanies** or **Appalachian Range**. They are a double, and in some parts a triple range, and support a low table-land. Their average height is from 2500 to 3000 feet. The highest peak is **Mount Washington**, in the State of Maine, which is 6000 feet in height. Across the St Lawrence river these high-lands expand into the low, cold, and inhospitable table-land of Labrador.

**6. Mexican Cordilleras.**—In Mexico the mountains of North America reach their greatest development. Here we have the Eastern and Western Cordilleras, with between them the large wedge-shaped **Plateau of Mexico**. This table-land has in general a rugged appearance; and it is often cut across by deep gullies, through which wild mountain-torrents find their way to the sea. In the south the table-land is crossed by a line of volcanic peaks, the highest of which, **Popocatepetl**—the highest peak in North America—is nearly 18,000 feet in height.

**7. The Prairies.**—Between the two great lines of high-land—the Pacific on the west, the Atlantic on the east—

stretch the great grassy plains of North America. They occupy the whole of the centre of the continent, and extend from the Gulf of Mexico as far as to the Arctic Ocean. These plains are called, in the United States, prairies, from a French word which means "meadows." They are completely covered with long waving grass, which, moved by the wind, gives the scene the appearance of a vast rolling ocean of green. These prairies afford food for the countless herds of elks, antelopes, buffaloes, and wild horses which constantly move over their boundless surface. Better than this, however—they allow the rivers which come down by the mountains room to expand and develop themselves—to form thousands of miles of the best water-highway—and thus to lay the foundation of the vast system of internal commerce which forms a large part of the greatness of America.

**tra'-versed**, crossed or passed over.  
**mar'-gin**, edge.  
**suc-cess'-ive**, following in regular order. (L. *sub*, under; *cedere*, to go.)

**gran'-deur**, beauty that causes awe.  
**sheer**, straight up and down.  
**hoards** it, saves it up; holds it.

1. **Cascade Range**, called so from the number of waterfalls or cascades which come down its sides.
2. **Rio Grande** means *large river*.
3. **Mountain-passes**. Through these the great railway lines are built.
4. **Defiles**, deep rocky mountain-passes.
5. **Elk**, a large kind of deer which is now becoming scarce.
6. **The buffalo**, or bison, is an animal like a large ox. It is hunted by the natives for its beef.
7. **Internal commerce**, the trade of one district with another in the same country.

## THE PRAIRIES.

These are the gardens of the Desert, these  
 The unshorn fields, boundless and beautiful,



For which the speech of England has no name,—  
The Prairies. I behold them for the first,  
And my heart swells, while the dilated sight 5  
Takes in the encircling vastness. Lo! they stretch  
In airy undulations, far away,  
As if the ocean, in his gentlest swell,  
Stood still, with all his rounded billows fixed,  
And motionless for ever.—Motionless?— 10  
No—they are all unchained again. The clouds  
Sweep over with their shadows, and beneath,  
The surface rolls and fluctuates to the eye.  
Dark hollows seem to glide along, and chase  
The sunny ridges. Breezes of the south! 15  
Who toss the golden and the flame-like flowers,  
And pass the prairie hawk that, poised on high,  
Flaps his broad wings, yet moves not—ye have played  
Among the palms of Mexico, and vines  
Of Texas, and have crisped the limpid brooks 20  
That from the fountains of Sonora glide  
Into the calm Pacific;—have ye fanned  
A nobler or a lovelier scene than this?  
Man hath no part in all this glorious work :  
The hand that built the firmament hath hewed 25  
And smoothed these verdant swells, and sown these  
slopes  
With herbage, planted them with island groves,  
And hedged them round with forests—fitting floor  
For this magnificent temple of the sky—  
With flowers whose glory and whose multitudes 30  
Rival the constellations! The great heavens  
Seem to stoop down upon the scene in love—  
A nearer vault, and of a tenderer blue,  
From that which bends above the eastern hills.

Still the great solitude is quick with life : 35  
 Myriads of insects, gaudy as the flowers  
 They flutter over, gentle quadrupeds,  
 And birds, that scarce have learned the fear of man,  
 Are here, and gliding reptiles of the ground,  
 Startlingly beautiful. The graceful deer 40  
 Bounds in the wood at my approach.

W. C. BRYANT.

di-lat'-ed, open wide; taking in a wide view.	fuc'-tu-ates, moves up and down.
en-cir'-cling, surrounding.	poised, balanced on the wing.
un-du-la'-tions, waves. (L. <i>unda</i> , a wave.)	crisped, ruffled; caused ripples upon.
	lim'-pid, clear.
	fir'-ma-ment, sky.

1. *Sonora*, a frontier state in the north-west of Mexico, having on the north the United States.

2. *Constellations*, groups of stars.

3. *Myriad*, literally *ten thousand*, applied indefinitely to an immense number.

#### 43.—RIVERS AND LAKES.

1. **The Mississippi-Missouri.**—From a small lake situated near the side of a low sandstone ridge in the centre of the State of Minnesota issues a small stream, which, after a course of nearly 4000 miles, throws its huge volume of water into the warm waters of the Gulf of Mexico, and is known as the mighty Mississippi. Its course through Minnesota is broken and rapid. It passes through many small lakes, and forms a series of rapids—passing over the Falls of St Anthony and the Minnehaha Falls. On its right bank it receives the **Missouri**, a river which rivals it in volume and outdoes it in the length of its course. The Missouri rises among the Rocky Mountains, and is formed by the junction of three mountain-tor-

rents. On entering the State of Dakota it is joined by the **Yellowstone River**, which flows out of the beautiful Yellowstone Lake of Wyoming, and forms one of the chief features of the Yellowstone Park—the great national park of the United States. After a course of about 3000 miles it joins the Mississippi; and the now mighty river—fitting companion to the endless breadths



The St Lawrence River.

of plain through which it flows—rolls majestically on its way to the sea. On the east or left bank, the Mississippi receives the **Ohio**, which, formed by the union of several navigable rivers, has a course of nearly 1000 miles, and is navigable for steamers throughout its whole length. On the west it is joined by the **Arkansas** and **Red** rivers, both of which are not much shorter than the Danube.

Taking the Mississippi-Missouri as one stream, it measures 4400 miles in length—that is, it is the longest river in the world; and, with its tributaries, it has above 35,000 miles of navigable water-ways. Here, then, we have, in this stream alone, the basis of a system of intercommunication between the different climates and soils in the United States, such as exists nowhere else, not even in South America.

**2. The St Lawrence.**—The **St Lawrence** is the great outlet for the surplus waters of the five great lakes, and is the chief highroad for commerce from the east into the interior of America. It is called *St Louis* before it falls into Lake Superior, and *Niagara* between Lake Erie and Lake Ontario. Between Erie and Ontario are the Falls of Niagara, the largest, though not the highest falls, in the world.

**3. The Rivers of the Hudson and Arctic Basins.**—The **Saskatchewan**, a great river rising in the Rocky Mountains, flows eastwards, and falls into Lake Winnipeg. Emerging from Winnipeg, it is known as the **Nelson**, and pours its waters into the great inland sea, Hudson Bay. There are only two more rivers in the north of any size or importance,—the **Mackenzie** and the **Yukon**. The Mackenzie is formed by the union of the **Athabasca** and **Peace**, and pours its ice-covered waters into the Arctic Ocean. The Yukon rises in the Rocky Mountains, and flows north-west into Behring Strait.

**4. The Rivers of the West.**—The rivers of the western or Pacific slope are for the most part mountain-torrents,—now rushing through deep ravines, now falling over high precipices. The **Fraser River** flows through British Columbia; the **Columbia**, through the north-west of the United States. The **Colorado**, falling into

the Gulf of California, is the most remarkable of all rivers. It has cut for itself through the rocks narrow deep ravines, called cañons. The great cañon of the Colorado river extends for about 200 miles, the perpendicular walls of rock rising sheer up, and from between three-quarters of a mile to a mile and a quarter in height.

**5. The Lakes of America.**—The great lake district of North America is in the north-east of the continent. They may be divided into two classes,—the five great lakes of the St Lawrence, and the strictly Canadian lakes. There are also countless lakes lying in the dominion west of Hudson Bay and on the courses of the northern rivers. Some of these, indeed, rival in size the great lakes of the St Lawrence. The greatest are **Manitoba** and **Winnipeg**, on the Nelson river; **Athabasca**, **Great Slave Lake**, and **Great Bear Lake**, on the course of the Mackenzie. The five great lakes of the St Lawrence hold in their basins about half the fresh water in the world. The greatest is **Lake Superior**, which is about the size of Ireland. Joined to it by wide straits are **Huron**, the deepest, and **Michigan**, the only one of the five that lies wholly in United States territory. The lowest, and at the same time the smallest, are **Erie** and **Ontario**. The greatest inland lake, and at the same time the highest lake in North America, is **Great Salt Lake**, which lies on the middle of the great western plateau. Seen from Salt Lake City, it looks like a mirror of burnished silver, enclosed in a frame of purple mountains.

ma-jes'-ti-cal-ly, grandly.  
ba'-sis, foundation.

e-merg'-ing, coming out of.  
bur'-nished, brightly polished.

1. **National Park**, a great district in the western State of Wyoming, which belongs to the nation. It is about half the size of Yorkshire, and has, besides the lake, a great number of geysers.

## 44.—CLIMATE AND PRODUCTIONS.

1. **Climate.**—(i) The greater part of North America lies within the North Temperate Zone, and therefore has a climate corresponding to that of Europe. The climate of Europe, however, is greatly tempered by its large number of inland seas; and therefore it is only in the vast bulk of Russia that the climate is excessive—that is, very hot in summer, and very cold in winter. In America, on the other hand, owing to its small number of inland seas, the climate is much more continental; the summer is much warmer, and the winter much colder, than the winters and summers of Europe.

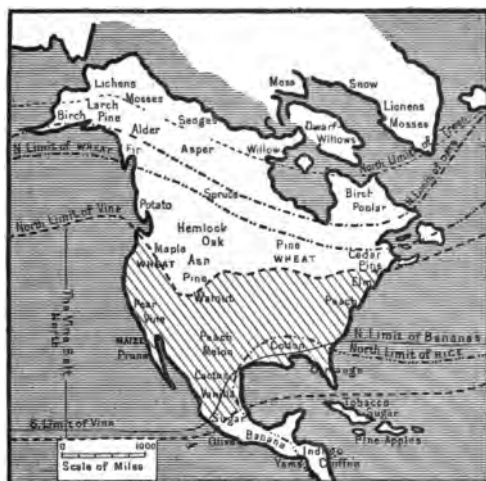
2. **Climate.**—(ii) Much of America lies within the Arctic Circle, and the vast northern plains are frozen over for half the year; in the hottest months of summer they become plains of mud or marsh. Only the southern part of Mexico, and the whole of Central America, lie within the tropics. Thus in America we have all degrees of climate, from the continual winter of the Arctic regions to the never-ending summer of the tropics. Another consideration, too, renders the climate of North America excessive. If the moist east wind blowing from the Atlantic veer round to the north or north-west, the temperature may suddenly fall through  $30^{\circ}$  or  $40^{\circ}$  in a few hours—that is, from summer-heat to freezing-point. These sudden changes of temperature are caused by the fact already noticed, that the great central plain extends without a break from the Gulf of Mexico to the Arctic Ocean. Thus the icy north winds pass over these plains without being intercepted or turned aside by any ridge of hills or range of mountains.

**3. Rainfall.**—(i) The rainfall in all countries is regulated by the kind and direction of the prevailing winds, and by the arrangement of the mountain-chains. Thus in Mexico and the south of the United States the moisture-laden trade-winds from the north-east come in contact with the Mexican Cordilleras, and are forced to drop a great part of their moisture. On the Pacific coast, exactly opposite, we find the north-east trades blowing; but now they blow from a colder to a warmer region, and from the land to the sea. Thus they are able to give up no moisture to the land; and this region is therefore dry, sandy, and desert-like. Lower California and the great basin of the western plateau have the lowest rainfall in North America—a rainfall of only eight inches in the year.

**4. Rainfall.**—(ii) Further north along the Pacific coast we find a warm and moist wind blowing from the south-west. It has come from the great expanse of the Pacific, and from a warmer part of the earth, and is therefore heavily laden with moisture. It comes in contact with the cold peaks of the Cascade Range, and is forced to let fall its moisture; and here, as we should expect, we have the greatest rainfall in the continent—80 inches a-year. Passing over the successive peaks running parallel with the west coast, this wind soon loses all its moisture; and we should thus expect the eastern slopes of the Rocky Mountains to have a very low rainfall—and this is so. But how do we have so many large rivers rising on the Rocky Mountains? The north-east trade-winds, which blow over the Gulf of Mexico, are partly turned out of their course by the mountains of Mexico, and pass up the Mississippi valley, dropping moisture ever as they go. The lands round the mouth of the Mississippi are therefore much more rainy than those

near its source: the rainfall at the mouth of the Mississippi is 64 inches, at its source only 24 inches. On the eastern slopes of the Alleghanies, too, rain falls abundantly, though the average rainfall is only about half what it is on the slopes of the Cascade Range.

**5. Vegetation.**—(i) As the rainfall is regulated by the prevailing winds and the arrangement of the great mountain-systems, so the vegetation of a country is regulated by



Plant-Map of North America.

its rainfall. Thus in California, where the rainfall is so great, we have the giant pines—the largest trees in the world. In the Great Basin—the high plateau between the Sierra Nevada and the Rocky Mountains—we find a large stretch of sandy desert, with a few small salt lakes, and at certain seasons one or two short brackish streams.

**6. Vegetation.**—(ii) On the shores of the Gulf of Mexico,



in Florida, in the Mississippi valley, and along the eastern slope of the Alleghanies, where the rainfall is great, we have the cultivation of rice, cotton, and the sugar-cane. In the central plain, where there is no very great supply of rain, we have no great forests like those which fill the valley of the Amazon; but we have great grassy plains, the widest in the world, with their numerous herds of wild cattle. In the great Canadian plain we have large forests extending over hundreds of miles; and where they have been cleared away, the ordinary European grains are successfully raised.

**tem'-pered**, toned down.

**ex-cess'-ive**, going to extremes. (L.

*ex*, out of; *cedere*, to go.)

**veer**, change in direction.

**in-ter-cept'-ed**, caught and kept back.

(L. *inter*, between; *capere*, to take.)

**ex-panse'**, stretch. (L. *ex*, out; *pan-*

*dere*, to stretch.)

**a-bun'-dant-ly**, plentifully.

#### 45.—THE UNITED STATES.

**1. The United States.**—The vast breadth of land which stretches between the Dominion of Canada on the north and Mexico on the south, and between the Pacific on the west and the Atlantic Ocean on the east, is held by a large number of governments, which are formed into one body under the name of **The United States**. They numbered in the end of last century only thirteen; there are now thirty-eight. The original thirteen formed part of the British Empire; but in the reign of George III. a quarrel arose. The British Parliament wished to tax the colonies; the colonists refused to pay; troops were

sent to compel them; war broke out. The war under the leadership of George Washington began in 1775, and lasted for some years; the British were defeated; and England was in 1782 compelled to recognise the independence of the United States.



Map of the United States.

**2. Number and Size.** — There are now thirty-eight States in the Union, ten territories, and one district. The district is called the "District of Columbia"; and in it stands **Washington**, the federal capital of the whole of the States. The total area of the United States is not much less than that of Europe; and it is more than fifty times as large as that of England and Wales. The population of the whole of the States amounts to more than 50 millions. Of these,  $43\frac{1}{2}$  millions are whites; the rest are negroes, who number  $6\frac{1}{2}$  millions; and the remainder, Indians and Chinese.

**3. Government.**—The government of the United States is a republic. The whole of the States are under one general government; but each State also possesses its own Parliament and makes its own laws. The chief of the republic is called the **President**. A new President is elected every four years. The laws are made by Congress. This body consists, like our own Parliament, of two Houses—an Upper House and a Lower House. The Upper House is called the **Senate**; and its members are elected by the members of the Parliament of each State. The Lower House is called the **House of Representatives**; and its members are elected directly by the people.

**4. Agriculture.**—The most important industry of the people of the United States is the tillage of the ground; and its chief wealth consists in agricultural produce—grain and stock. The chief seats of the agricultural industry of the United States are—the central plain of the Mississippi; the Atlantic plain on the east; and the California basin on the west. So various are its soils and its climates, that the Union grows cotton, rice, and sugar in the south, and rye, oats, and barley in the north; while its crops of maize and wheat are its largest crops. Wheat is the largest of all the crops; but cotton is the most important—because it is the most profitable. The old saying was, “Cotton is king”; and this meant that all interests must give way to the largest production of the best cotton, and that the prosperity of England—and especially of Lancashire—depended on a regular supply of cheap cotton in its raw state.

**5. Mining.**—The industry which aims at extracting the useful and the precious metals from the rocks which contain them, is one of the greatest in the United States. It

is also, perhaps, the most rapidly growing industry in the whole country. Coal and iron are found in large quantities on the high-lands of the Atlantic slope; a great deal of gold and silver is mined among the Rocky Mountains; lead is found in the valley of the Upper Mississippi; and copper on the shores of Lake Superior.

**6. Manufactures.**—The manufactures of the United States are very little inferior in importance to their agriculture and their mining. Two conditions of cheap manufacture exist in enormous quantity in the States; there are cheap coal and great water-power. Most of the great manufacturing seats are found north of the Potomac and the Ohio. The spinning and weaving of cotton and wool; the making of tools and machinery; the grinding of flour and the cutting of timber,—these are the chief industries, after agriculture, of the Americans of the United States. . . In the New England States—a group of States in the north-east, fishing is also a great source of wealth.

**7. Commerce.**—The buying and selling of goods—which is called **Commerce**—is carried on in the United States on a larger scale than in any other part of the world, with the exception of Great Britain. Not only have the States much to sell, but they have so many easy ways of sending their products to the sea-coast. Countless railways, valuable and convenient water-ways with deep channels and slow currents, line the country in every possible direction. Of the innumerable water-routes by which goods are sent down to the seaboard, there are three worthy of special mention. The first is the route by the great lakes and the St Lawrence to the ocean. The second—which is still more important and more frequented—is by the great lakes, the Erie Canal, and the Hudson river, to New

York. This, indeed, is the principal route of trade—the main highway of commerce—on the American continent. The third great water-route is by the Mississippi and its large branches down to New Orleans. This last is no doubt destined, in the near future, to be the chief water-



Roadmaking through an American Forest.

way of the United States. . . The railways are beyond counting. In general, it may be said that those lines of railroad which run from north to south convey most passengers, while those which go from west to east carry most goods.

com-pelled', forced. (L. <i>con</i> , together; <i>pellère</i> , to drive.)	Con'-gress, the meeting together. (L. <i>con</i> , together; <i>gradi</i> , to step.)
rec'-og-nise, acknowledge. (L. <i>re</i> , again; <i>cognoscère</i> , to know.)	ex-tract'-ing, the smelting out (L. <i>ex</i> , out of; <i>trahère</i> , to draw.)
con-vey', carry. (L. <i>con</i> , together; <i>vehère</i> , to carry.)	

1. The District of Columbia is a small area of 61 square miles that was cut out of the State of Virginia and presented to the nation.

2. **Railways.** Most of the goods from north to south pass along the Mississippi and its tributaries, and hence the railways carry considerably less goods from north to south. Again, the eastern States along the coast are most populous, and most of the passenger traffic is in them from north to south.

## THE KANSAS EMIGRANTS.

1. We cross the prairie as of old  
The pilgrims crossed the sea,  
To make the West, as they the East,  
The homestead of the free !
2. We go to rear a wall of men  
On Freedom's southern line,  
And plant beside the cotton-tree  
The rugged northern pine !
3. We're flowing from our native hills  
As our free rivers flow ;  
The blessing of our motherland  
Is on us as we go.
4. We go to plant her public schools  
On distant prairie swells,  
And give the Sabbaths of the wild  
The music of her bells.

5. Upbearing, like the Ark of old,  
The Bible in our van,  
We go to test the truth of God  
Against the fraud of man.
6. No pause, nor rest, save where the streams  
That feed the Kansas run,  
Save where our Pilgrim gonfalon  
Shall flout the setting sun !
7. We'll tread the prairie as of old  
Our fathers sailed the sea,  
And make the West, as they the East,  
The homestead of the free !

J. G. WHITTIER.

gon'-fal-on, a standard or banner. |

flout, mock.

1. **Pilgrims**, the Pilgrim Fathers, who went from England to America in 1620.
2. **Motherland**, America.
3. **Ark**. The Ark was carried before the Israelites in their wanderings.

#### 46.—THE GREATEST STATES IN THE UNION.—I.

1. **New York**.—Let us take a rapid survey of the United States, and note what the greatest of them are most remarkable for. The greatest of all is **New York**, which is called by the Americans "the Empire State." The State of New York is first in wealth, first in commerce, and first in population. The largest town in the State is **New York**—a city which is surpassed in size by only two cities in Europe—London and Paris. The population of New York itself is more than  $1\frac{1}{2}$  million; but, during the day, the population reaches the height of more than  $1\frac{1}{2}$  million,

for about 300,000 persons enter the city in the morning for business, and leave it at night for rest and sleep. If we count in with New York the neighbouring cities of **Brooklyn** and **New Jersey**, which are joined to it by ferries and bridges, the population of that vast centre of industry and commerce will amount to more than two millions. . . On the north-western edge of the State of New York, we find the Falls of Niagara.

**2. Pennsylvania.**—While the State of New York stands at the head of all the other States as a centre of commerce, the State of **Pennsylvania** is the first in manufactures. It is also the chief mining State in the Union. It produces one-half of the iron, and three-fourths of the coal consumed in the United States. The largest town in Pennsylvania is “the City of Brotherly Love,” or **Philadelphia**, which has a population of nearly a million, Its pretty streets, lined with trees; its neat red brick houses, with their green venetian blinds, and white marble steps in front; its general air of peace and comfort,—have combined to acquire for it the name of “the City of Homes.”

**3. Mississippi.**—The State called **Mississippi** is one of the “Gulf States,” because it sends its waters into the Gulf of Mexico. It is the greatest State in the Union for the production of cotton. It has no seaport of its own; but it sends its countless bales of cotton down the river in large and rapid steamers to New Orleans, where they are transhipped for England and for foreign countries.

**4. Ohio.**—The State called **Ohio** takes its name from the river Ohio—one of the most important tributaries of the Mississippi. It is the first State in the Union for the production of wool. **Cincinnati**, its largest



town—a city with nearly 300,000 inhabitants—has an enormous trade in pork and grain. It is called the “Metropolis of the Ohio Valley”—a valley which is one of the largest and most fertile in the United States.

**5. Illinois.**—The State of **Illinois** is the greatest agricultural State in the Union, and probably in the world. Its production of grain is endless; and the prairies of Illinois grow thousands upon thousands of square miles of excellent wheat. The largest city in the State is **Chicago**. It is the chief market in America for pork, and timber, and grain; and as a grain market for the whole world, it is second only to London. It is called, and justly, the “Metropolis of the St Lawrence Basin”; for it draws into its warehouses almost all the products of that wide and rich country. In the year 1871, nearly the whole of Chicago was burnt down; but, while the fire was yet raging, the inhabitants were busy drawing up plans for rebuilding their warehouses on a larger scale, and one brave-hearted citizen put up a notice in the midst of the smoking ruins, “Business conducted as usual”! The population of Chicago now amounts to more than half a million; fifty years ago there were only two or three wooden houses on the edge of Lake Michigan.

**6. Missouri.**—This great and fertile country, which receives its name from the mighty river **Missouri**, which runs through it, is one of the wealthiest States in the Union. Its chief wealth consists in its agricultural products, and also in the abundance and high quality of its coal and iron. There are within its borders two mountains, which are almost wholly masses of iron ore—Iron Mountain and Pilot Knob. Its largest city is **St**

**Louis**, on the Mississippi. It is called the "Metropolis of the Mississippi Valley"; and many persons have advocated that it should be made the capital of the whole Union, because of its central position, and the thousands of miles of railways and water-ways that meet in it. Twenty-four lines of railway centre in this city, and connect it with all parts of the country—north, south, east, and west.

**com-bined'**, joined.

**ac-quire'**, to get.

**con-duct'-ed**, gone on with. (L. *con*,

together; *ducere*, to lead.)

**ad'-vo-cat-ed**, advised. (L. *ad*, to;

*vocare*, to call.)

1. **Pennsylvania**, "the woody country of Penn," called after William Penn, one of the earliest emigrants.

2. **Metropolis**, the mother-city. (From Gr. *mētēr*, a mother; *polis*, a city.) The term is generally applied to the capital of a country.

## THE BLUE AND THE GRAY.

In the churchyard of Columbus, in the State of Mississippi, lie the graves of many soldiers who fell in the Civil War of 1861-65. The women of the town visit these graves at regular times, and strew flowers alike on the graves of the Confederate and of the National soldiers. The Yankee soldiers were dressed in blue, the Southerners in gray.

1. By the flow of the inland river,  
     Whence the fleets of iron have fled,  
 Where the graves of the grave-grass quiver,  
 Asleep are the ranks of the dead :—  
     Under the sod and the dew,  
     Waiting the judgment-day ;—  
 Under the one, the Blue ;  
     Under the other, the Gray.

2. These in the robings of glory,  
Those in the gloom of defeat,  
All with the battle-blood gory,  
In the dusk of eternity meet:—  
Under the sod and the dew,  
Waiting the judgment-day;—  
Under the laurel, the Blue;  
Under the willow, the Gray.
  
  3. From the silence of sorrowful hours,  
The desolate mourners go,  
Lovingly laden with flowers  
Alike for the friend and the foe:—  
Under the sod and the dew,  
Waiting the judgment-day;—  
Under the roses, the Blue;  
Under the lilies, the Gray.
  
  4. Sadly, but not with upbraiding,  
The generous deed was done;  
In the storm of the years that are fading,  
No braver battle was won:—  
Under the sod and the dew,  
Waiting the judgment-day;—  
Under the blossoms, the Blue;  
Under the garlands, the Gray.
  
  5. No more shall the war-cry sever,  
Or the winding rivers be red;  
They banish our anger for ever  
When they laurel the graves of our dead!  
Under the sod and the dew,  
Waiting the judgment-day;—
-

Love and tears for the Blue,  
Tears and love for the Gray.

F. M. FINCH.

rob'-ings, dresses. | up-braid'-ing, reproach.  
sev'-er, part; cut asunder.

1. **Laurel.** Laurel-leaves were used to form a wreath for the brow of a conqueror. **Willow.** Willow is the emblem of sadness, and gloom, and death. The same idea is brought out in the next verse by the contrast between *roses* and *lilies*.

#### 47.—THE GREATEST STATES IN THE UNION.—II.

1. **Louisiana.**—The State called **Louisiana** was settled by the French, and was named after Louis XIV. of France. French is still the language of a great part of its largest city. Louisiana lies in the lowest part of the Great Plain of America. Much of the land is below the level of the Mississippi, which is kept in by high and broad walls of earth, called "levees." But the river sometimes bursts through these; and then hundreds of square miles of sugar, rice, and cotton plantations are ruined by the mud and water. The largest city in this State is **New Orleans**, which is the greatest cotton port in the world.

2. **Texas.**—The largest State in the Union is called **Texas**. It is more than five times as large as England; and it is famous for its vast breadths of very fertile soil—millions upon millions of acres. About 25,000 square miles—a surface nearly equal to the area of Scotland—is good for the growth of cotton; about as much more is well adapted for the production of excellent wheat. But Texas is famous chiefly for its cattle.

These are driven about on its boundless plains in herds which are numbered, not by scores, but by thousands. The largest city is **Galveston**; and it is also the chief port.

**3. Nevada.**—The State of **Nevada**, high up among the Rocky Mountains, is the great *Silver State*. It produces four-fifths of all the silver, and half of all the lead, mined in the vast territory of the United States. **Virginia City** is its largest town; and this city is famous for its rich silver-mines. A single vein of one of these mines is said to have yielded more than £4,000,000 worth of silver in a year.

**4. California.**—The State of **California**—"the Golden State"—is the greatest and richest of all the Pacific States. In corn and wine, in gold and other metals, it is perhaps the richest country in the world. Its wheat is remarkably hard and fine; and so fruitful is the soil, that many large fields have been known to yield eighty bushels of wheat to the acre. The finest fruits and the finest kinds are at home in the splendid climate of the State of California—figs, oranges, almonds, melons, grapes, and olives. This State is also famous for its "big trees," and for the wonderful valley of the **Yosemite**. These trees are gigantic evergreens, some of which are upwards of 400 feet high and more than 3000 years old. The Yosemite Valley is one of the most charming and picturesque spots in the whole world; and it contains the **Yosemite Falls**, which are the highest on the face of the globe. The Merced river falls, in three wondrous leaps, a height of more than 2000 feet into the valley below. The largest city in California is its great port, **San Francisco**. It stands on the Bay of San Francisco, and at the western end of the Central Pacific Railway, which connects the

Atlantic with the Pacific. In 1847, San Francisco consisted of a few wooden houses; to-day it is a city of more than a quarter of a million of people. The change is due to the discovery of gold. "People crowded in from all parts of the world; the port was crowded with vessels; the rattle of the shovel and the noise of the pick were heard in every mountain-gorge; the din of commerce broke for ever the silence of centuries. Villages and towns, farmhouses, schools, and churches, sprang up everywhere; wharves were built, roads and railways opened; stage-coaches and steamers crowded the land-ways and the water-ways; and lands, houses, and labour rose to an enormous and incredible value." The situation of the city on the Pacific gives it the power of commanding the vast trade of China and Japan.

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<p>vein, a seam of metal through a rock. pic-tur-<i>esque</i>, with the features that make a striking picture.</p>	<p>in-cred'-i-b-le, that cannot be believed. (L. <i>in</i>, not; <i>credēre</i>, to believe.) vast, very great.</p>
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1. Louis XIV. was king of France during the reigns of five British sovereigns—Charles I. to Anne.
2. Levees, raised parts. (L. *levāre*, to raise.)
3. Pacific States, the States along the Pacific coast.
4. Wharf, a platform at which ships are loaded and unloaded.

#### 48.—MEXICO AND CENTRAL AMERICA.

1. **Mexico.**—The Republic of Mexico consists chiefly of a high table-land, most of which is from 6000 to 8000 feet above the level of the sea. Most of the country is thus more than a mile up in the air. It has sea-coast both on the Atlantic and the Pacific. In size it is about

ten times as large as Great Britain ; the population is little over ten millions. The whole country is made up of volcanic rock.

**2 The Build of Mexico.**—Two mighty ranges of mountains run south from the United States into Mexico at a distance of 400 miles apart, but they come nearer and nearer to each other as the peninsula grows narrower.



Map of Mexico and Central America.

These two ranges support between them a lofty table-land—not by any means level, but crossed by high mountain-ranges, cut up by narrow valleys and clefts, and filled with rugged eminences and numerous plateaux of varying heights. The whole country is thus a thick mountain-wedge between the two great oceans of the world. Only on the coast is there any low land ; and this is at best

a narrow strip. There is very much more low land on the shores of the Gulf than there is on those of the Pacific, as the country, like the rest of North America, slopes to the east.

**3. The Three Regions and Climates.**—There are in Mexico three well-marked regions, each with its one special climate. These are the **Warm Land** (Tierra Caliente), the **Temperate Land** (Tierra Templada), and the **Cold Land** (Tierra Fria). The Warm Land, which lies along the coast, has a tropical climate and tropical productions, and is infested by yellow fever. The Temperate Region, which is called the "Paradise of Mexico," includes most of the interior table-land. In this part of the country, at different heights, grow coffee, indigo, maize, cotton, chocolate, and the finer fruits. In some districts four crops of maize are raised every year; and in each crop the yield is five-hundred-fold. Three crops of cocoa a-year are also gathered on some of the richer soils. The Cold Region embraces the loftiest parts of the table-land; and here the climate is severe, and the soil poor and unproductive.

**4. Mining.**—The table-land of Mexico is one of the richest in metals in the world. Indeed, the whole range of mountains and table-lands on the west coast of the New World, from Patagonia to British Columbia, and even to Alaska, almost everywhere contains metals, and may be regarded as the treasury of the globe. The Sierra Madre, or "Mother Chain," which crosses the Mexican plateau, is believed to be the richest of all mountain-chains, both in the useful and in the precious metals. Not only are there gold and silver, there are also copper, lead, tin, zinc, and iron. But the Mexicans, in their greed and haste to grow rich, have neglected the



mining of the useful metals, and have sought chiefly for gold and silver. Silver is the chief article of export from Mexico; and nearly four millions' worth were sent out from the country in the year 1880.

**5. Trade.**—In addition to silver, Mexico sells to other nations gold, copper ores, cochineal, hides, and fine woods. We buy from them more than £200,000's worth of mahogany every year.

**6. Chief Cities.**—The largest city in Mexico is **Mexico**, and it is also the capital. It contains a population of nearly a quarter of a million. The city is girded by a range of lofty mountains, from which rise through the clear crystalline air two peaks which are covered with perpetual snow. The highest of these is **Popocatepetl**, or "Smoking Mountain"—an almost perfect cone, an active volcano, the highest mountain in Mexico, and the second highest on the continent of North America. It rises to the height of nearly 18,000 feet. Mexico is one of the great cities of the world; and there are many handsome public buildings. . . The second largest town in Mexico is **Guadalajara**. . . The chief port on the Atlantic is **Vera Cruz**; the chief port on the Pacific is **Acapulco**.

**7. Central America.**—**Central America** is the name given to five independent republics and the small colony of **British Honduras**. The five republics are **Guatemala**, **Honduras**, **San Salvador**, **Nicaragua**, and **Costa Rica**. Of these, the largest is Guatemala; and it is about one-third larger than Ireland. This country is the region from which we get most of our ornamental woods, such as mahogany—and our dye-woods, such as logwood. The forests abound in birds with the gayest, brightest, and most varied plumage; and there are many venomous reptiles. Like Mexico the whole region is subject to

frequent and violent earthquakes and volcanic eruptions; and it is no uncommon incident to hear of a whole city being swallowed up. The little state of San Salvador has no fewer than sixteen volcanic peaks; and its capital has been destroyed by earthquakes several times. And, while nature is subject to perpetual disturbance, the States and cities themselves are the scenes of political commotion; and, in general, the election of a new president is carried on among civil war, revolutions, massacres, and political murders

**8. Commerce and Towns.**—The principal things bought by Great Britain from Central America are coffee, indigo, mahogany, and logwood. The chief supplies of mahogany come from Honduras. . . The largest town in Central America is **New Guatemala**, which contains about 60,000 inhabitants, and is therefore about half the size of Brighton. The capital of British Honduras is **Belise**. The houses are raised on pillars of mahogany about ten feet from the ground, so that the inhabitants may be free from the fever and ague-giving air which rises from the swamp in the neighbourhood. The fort which protects the harbour is built on "British soil,"—that is, on earth brought from Great Britain in British ships as ballast.

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**clefs**, openings. It is the noun from *cleave*. Compare *drive*, *drift*; *thieve*, *theft*, etc.  
**neglect**-ed, left untouched.

**gird**-ed, surrounded.  
**ven**'om-ous, poisonous.  
**per**-pet'-u-al, constant.

1. **Cochineal**, a red dye got from the dried bodies of small insects which live on the cactus plants of Mexico.

2. **Mahogany**, a hard and beautiful kind of wood much used in the making of furniture.

3. **Logwood** gives a red dye.

## 49.—THE WEST INDIES.

**1. Columbus.**—When Christopher Colon or Columbus saw on the horizon the shore of Watling's Island,—or San Salvador, as he called it,—he thought that it was a part of India, which he had sailed westward to seek. He therefore called this and the other islands in its neighbourhood the **West Indies**.

**2. The West Indies.**—The **West India Islands** consist of three groups,—the **Bahamas**, on the north ; the



Map of the West Indies.

**Greater Antilles**, in the middle ; and the **Lesser Antilles**, on the south. The Lesser Antilles are again subdivided into the **Leeward Islands** and the **Windward Islands**. The area of the whole of the Islands is a little larger than that of Great Britain ; but the population, in spite of the great fertility of the soil and excellence of the climate, is not so large as the population of London. . . The Islands are the property of several European nations—

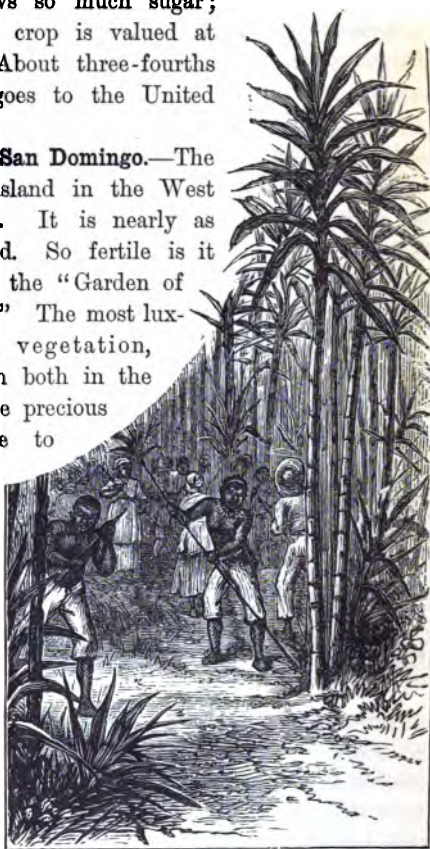
Spain, Great Britain, France, Holland, and Denmark; but Haiti is independent, and is divided into two republics.

**3. Climate.**—With the exception of some of the Bahamas, the whole of the West India Islands lie within the tropics, and some of them not far from the equator. Their climate ought therefore to be very hot. But the heat is tempered by two important influences,—nearness to the sea, which sends inland cooling sea-breezes; and the great height of the table-lands and mountainous regions in the interior. Thus, in this instance, too, high altitude becomes the corrective of low latitude. The rainy season lasts from May till November; and for the rest of the year the air is dry and clear. But these islands suffer greatly from terrible hurricanes or cyclones. The barometer falls rapidly; the wind rushes in; the strongest trees are torn up by the roots; the sea is lashed into a white frenzy of wave and foam; houses are torn from their foundations, and raised bodily into the air; and 24-pound guns have been lifted from their carriages and blown into the sea.

**4. Cuba.**—The island of **Cuba** is the largest of the West India Islands. It is nearly half the size of Great Britain. It is indeed the “Pearl of the Antilles”; and Columbus called it “the fairest land ever gazed upon by human eye.” The coast is low, flat, and very fertile; and sugar and tobacco are grown in large quantities. The interior is a high and mountainous table-land, with peaks more than twice the height of Snowdon. Fertile as the island is, only one square mile in every ten is cultivated. The rest is given up to marsh, forest, rock, and mountain. The capital of Cuba is **La Habana**—a word which means “The Haven”; but it is generally known as **Havannah**.

It is "a city of smells and noises;" and it is the chief port for the export of sugar. There is no country in the world that grows so much sugar; and the yearly crop is valued at £16,000,000. About three-fourths of this sugar goes to the United States.

**5. Haiti and San Domingo.**—The second largest island in the West Indies is **Haiti**. It is nearly as large as Scotland. So fertile is it that it is called the "Garden of the West Indies." The most luxuriant tropical vegetation, boundless wealth both in the useful and in the precious metals, combine to make it by nature extremely rich; but the indolence of the coloured inhabitants undoes everything. The rich fields lie untilled; the mines are unworked; there is not a plough or a steam-



Sugar Plantation.

engine in the whole island; and the splendid timber in the forests falls and lies and rots. The towns are going

to ruins ; and Sambo spends his time in idleness. There are two republics: **Haiti**, a Negro State, in the west ; and **San Domingo**, a Mulatto State, in the east. In Haiti no white man is allowed to own property or to hold office. The capital of Haiti is **Port-au-Prince**, with 21,000 ; of San Domingo, **San Domingo**, with 15,000 people.

6. **Jamaica**.—The island of **Jamaica** is the third largest in the West Indies ; and it is the largest island held by Great Britain. It was at one time the richest of our colonies. But, since the freeing of the slaves in 1833, the negroes have refused to work more than is needful to keep body and soul together. The island itself is very beautiful—especially the northern part. Bold cliffs, lovely inlets, rushing and roaring waters, green meadows soft as velvet, dark forests, song-birds, humming-birds, and butterflies—all join to make the northern coast a true Garden of Eden. The soil is extremely fertile : “tickle it with a hoe, and it laughs with a harvest.” Sugar, coffee, tobacco, allspice, and ginger are grown ; but not now in large quantities. The largest exports are sugar, rum, and tobacco. The largest town and chief port is **Kingstown** ; but the capital is **Spanish Town**,—a town not much larger than a large English village ; indeed it has only 700 inhabitants.

7. **The Lesser Antilles**.—Most of these islands belong to Britain. The best known are **Barbadoes**, **Antigua**, and **Trinidad**. The chief productions are sugar, arrow-root, cocoa, coffee, and cotton. Trinidad is famous for a remarkable lake of pitch or asphalt. The surface of the asphalt is nearly everywhere strong enough to bear your weight, and looks as if it had been just swept clean with a besom. Everything is pitch. “The very ship anchors in pitch ; the passengers disembark on a pitch

wharf ; pitch lies heaped up far and wide in the harbour ; in whatever direction the eyes are turned they light on nothing but pitch ; pitch, and the current market-price of pitch, are the one burden of conversation." In contrast to this dull scene, we may place the splendid sight of blossoming forest-trees towering up into the sky, whose crowns at certain seasons become vast domes of large brilliantly coloured flowers. But the most valuable thing in Trinidad is its position—its position off the mouth of the Orinoco, which is destined to become one of the great commercial rivers of the world.

**8. The Bahamas.**—The group called the **Bahamas**, which lie off Florida Pass, belong to Great Britain. They consist of hundreds of low islands, reefs, and rocks, very few of which are inhabited. The most fertile island in the group is **Watling's Island**. The capital is a town called **Nassau**, on New Providence Island. The chief product of the islands is pine-apples.

cor-rec-tive, what equalises or sets  
right.  
com-bine', unite ; join.

dis-em-bark', to come out of a ship.  
des-tined, fated.

1. **Cyclones**, great whirling storms of wind. (Gr. *kuklos*, a circle.)
2. A **mulatto** is the child of parents one of whom is black, the other white.

## THE VALLEY OF THE YUMURI IN CUBA.

1. When the dull grey mists of the morning  
Hung over the land and sea,  
We rode to the heights o'erlooking  
The vale of the Yumuri:  
Thither we rode, and waited  
Till the sun, like an angel of light,

Touched with transfiguring glory  
     The vaporous ghost of night.  
 While over the sea behind us  
     The clouds yet darkly lie, 10  
 They are silvery on the hillsides,  
     They are crimsoned up in the sky.  
 In the lap of the verdant mountains,  
     In many a mural chain,  
 Here ripens the golden orange, 15  
     Here grows the sugar-cane.  
 With glistening eyes, as of childhood,  
     O'er the summer hills I glance,  
 With eyes that the unfamiliar  
     Enchants with the hues of romance. 20

2. We rode through the valley at evening :  
     A golden sunset burned,  
 And against it the piny summits  
     Were black, as eve returned ;  
 The mountain shadows lengthened, 25  
     The sun went down behind,  
 And in streamers of rosy colour  
     Grew the twilight arch defined.  
 It was beautiful as a vision !  
     But we passed a gap in the hills, 30  
 By a river,—and lo ! the ocean  
     The vast horizon fills !  
 No more as it was at morning,  
     Wrapped in a misty cloud,  
 It stretched to the north in its grandeur, 35  
     With the gathering night its shroud.

WILLIAM GIBSON.



**trans-fig'-ur-ing**, changing the appearance of.

**va'-por-ous**, full of vapour or mist.

**mu'-ral**, like a wall.

**en-chante'**, delights.

**hues**, colours; appearances.

1. **Yumuri**, a valley in the island of Cuba.
2. **Piny**, that is pine-clad; covered with pine-trees.
3. **Vast horizon fills**, stretches out till it seems to touch the sky.
4. **Shroud**, the dress of the dead.

#### 50.—THE RED MAN AND THE BUFFALO.

The unending vision of sky and grass; the dim, distant, and ever-shifting horizon; the ridges that seem to be rolled upon one another in motionless torpor; the effect of sunrise and sunset—of night narrowing the vision to nothing, and morning only expanding it to a shapeless blank; the sigh and sough of a breeze that seems an echo in unison with the solitude of which it is the sole voice; and, above all, the sense of lonely unending distance, which comes to the traveller when day after day has gone by, night has closed, and morning dawned upon his onward progress under the same ever-moving horizon of grass and sky,—such is the feeling produced by the sight of an American prairie. Two—and only two—wild creatures have made this grassy desert their home.

Back, since ages at whose birth we can only guess, but which in all human probability go deeper into the past than the reign of Arab in Yemen or Kirghis in Turkestan, the wild red man has roamed these wastes: back into that dark night which hangs for ever over all we know or shall know of early America.

“The time before the white man came,” what a measureless eternity lies hidden under the words! This prairie

was here when the stones of the Pyramids were unknown, and the site of Babylon was a river-meadow—here, as it is to-day, treeless, desolate, and storm-swept. But whence came the wild denizens of the waste? Who shall say?

It has seemed to us, when watching this strange, wild hunter, this keen untutored scholar of nature, this human creature that sickens beneath our civilisation, and dies amidst our prosperity—it has seemed to us that he was of a race older and more remote than our own, a stock coeval with a shadowy age—a remnant, perchance, of an earlier creation which has vanished from the earth, preserved here in these wilds—a waif flung by the surge of time to these later ages of our own.

These are but idle speculations; still the antiquity of the Indian race rests upon other foundations. Far to the south, where the prairies rise into the lofty plateau of New Mexico, ruined monuments, weed-grown, and hidden beneath ivy and trailing parasites, stand like spectres from the tomb of time. Before these mouldering rock-hewn cities conjecture halts; the past has drawn over them a veil that no research can pierce, no learning solve. Inscrutable as the vestiges of an earlier earth they stand, the lonely ruined wrecks of the red man's race.

So much for the earlier existence of the human dweller on the prairie; to us he is but a savage—the impediment to our progress—the human counterpart of forests which have to be felled, mountains which must be tunnelled, rivers whose broad currents are to be spanned; he is an obstacle, and he must be swept away. To us it matters not that perchance his race dwelt here before a Celt had raised a Druid altar. The self-styled heirs to all the centuries reckon little of such things.

And now let us turn for a moment to that other wild creature which has made its dwelling on the Great Prairie. Over the grassy ocean of the West there has moved from time immemorial a restless tide. Backwards and forwards, now north, now south—now filling the dark gorges of the Rocky Mountains, now trailing into the valleys of the Rio del Norte, now pouring down the wooded slopes of the Saskatchewan—surged millions on millions of dusky bison.

What led them in their strange migrations no man could tell; but all at once a mighty impulse seemed to seize the myriad herds, and they moved over the broad realm which gave them birth as the waves of the ocean roll before the storm. Nothing stopped them on their march; great rivers stretched before them, with steep, overhanging banks, and beds treacherous with quicksand and shifting bar; huge chasms and earth-rents, the work of subterranean forces, crossed their line of march, but still the countless thousands swept on. Through day and night the earth trembled beneath their tramp, and the air was filled with the deep bellowing of their unnumbered throats.

In thus classing together the buffalo and the red man as twin dwellers on the Great Prairie, I have but followed the Indian idea.

“What shall we do?” said a young Sioux warrior to an American officer on the Upper Missouri some fifteen years ago; “what shall we do? the buffalo is our only friend. When he goes, all is over with the Dacotahs. I speak thus to you, because, like me, you are a Brave.”

It was little wonder that he called the buffalo his only friend. Its skin gave him a house; its robe, a blanket and a bed; its undressed hide, a boat; its short curved horn, a

powder-flask; its meat, his daily food; its sinew, a string for his bow; its leather, a lariat for his horse, a saddle, bridle, rein, and bit. Its tail formed an ornament for his tent; its inner skin, a book in which to sketch the brave deeds of his life, the "medicine robe" of his history. House, boat, food, bed, and covering—every want from infancy to age; and after life itself had passed, wrapped in his buffalo robe the red man waited for the dawn.

CAPTAIN BUTLER.<sup>1</sup>

*tor'-por*, a deep lifeless sleep.

*in u'-ni-son*, agreeing exactly with.

*den'-i-sens*, inhabitants.

*un-tu'-tored*, untaught.

*par'-a-site*, a plant which clings to and lives upon another plant or tree. The mistletoe is a parasite of the oak.

*in-scru'-ta-ble*, unsearchable. (*L. in*,

not; *scrutāri*, to look closely into.)

*ves'-ti-gea*, traces.

*ob'-sta-cle*, hindrance. (*L. ob*, in front of; *stare*, to stand.)

*im-me-mo'-ri-al*, beyond the reach of memory.

*sub-ter-ra'-ne-an*, under the earth. (*L. sub*, under; *terra*, the earth.)

1. **Ever-shifting horizon**, because wherever you move, the horizon still encircles you.

2. **Pyramids**, large monuments of ancient Egyptian architecture.

3. **Babylon**, the largest and most famous of ancient cities; it stood on the river Euphrates.

4. **Ruined monuments**. These are the ruins of the great cities of the ancient Aztecs. In antiquity and culture the Aztecs of Mexico may be compared to the Incas of Peru.

5. **Celts**, the old inhabitants of Britain and the west of France. **Druidism** was the religion of the ancient Britons.

6. **Dacotahs** one of the tribes of Red Indians.

## 51.—AMONG THE ROCKY MOUNTAINS.

At the entrance to the main range the valley of the river is about two miles wide. The river itself preserves its general width of 250 to 300 yards with singular uni-

<sup>1</sup> From 'The Wild North Land.'

formity. The reaches are from one to three miles in length, the banks are dry, the lower beaches are level and well wooded, and the current becomes deeper and less rapid.

Early in the morning we reached the entrance to the main range. A short rapid marks it, a rapid easy to run at all stages of water, and up which we towed our canoe, carrying the more perishable articles to save them from the spray—a precaution which was, however, not necessary, as no water was shipped.

We were now in the mountains. From the low terrace along the shore they rose in stupendous masses; their lower ridges clothed in forests of huge spruce, poplar, and birch; their middle heights covered with dense thickets of spruce alone; their summits cut into a thousand varied peaks, bare of all vegetation, but bearing aloft into the sunshine, 8000 feet above us, the glittering crowns of snow, which, when evening stilled the breezes, shone reflected in the quiet waters, vast and motionless.

Wonderful things to look at are these white peaks, perched up so high above our world. They belong to us, yet they are not of us. The eagle links them to the earth; the cloud carries to them the message of the sky; the ocean sends them her tempest; the air rolls her thunders beneath their brows, and launches her lightnings from their sides; the sun sends them his first greeting, and leaves them his latest kiss. Yet motionless they keep their crowns of snow, their glacier-crests of jewels, and dwell among the stars, heedless of time or tempest.

For two days we journeyed through this vast valley, along a wide, beautiful river, tranquil as a lake, and bearing on its bosom, at intervals, small isles of green forest. Now and again a beaver rippled the placid surface, or a

bear appeared upon a rocky point for a moment, looked at the strange lonely craft, stretched out his long snout to sniff the gale, and then vanished in the deep forests of the shore. For the rest all was stillness ; forest, isle, river, and mountain,—all seemed to sleep in unending loneliness ; and our poles grating against the rocky shore, or a shot at some quick-diving beaver, alone broke the silence, while the echo, dying away in the vast mountain cañons, made the relapsing silence seem more intense.

Thus we journeyed on. On the evening of the 8th of May we emerged from the pass, and saw beyond the extremity of a long reach of river a mountain-range running north and south, distant about thirty miles from us. To the right and left the Rocky Mountains opened out, leaving the river to follow its course through a long forest valley of considerable width.

We had passed the Rocky Mountains, and the range before us was the central mountain-system of North British Columbia.

CAPTAIN BUTLER.<sup>1</sup>

sin'-gu-lar, marked ; unusual.  
 launch'-es, sends forth.  
 tran'-quil, peaceful.

pla'-cid, quiet ; smooth.  
 re-laps'-ing, falling back again. (I.  
 re, again ; *labi*, to glide.)

<sup>1</sup> From 'The Wild North Land.'

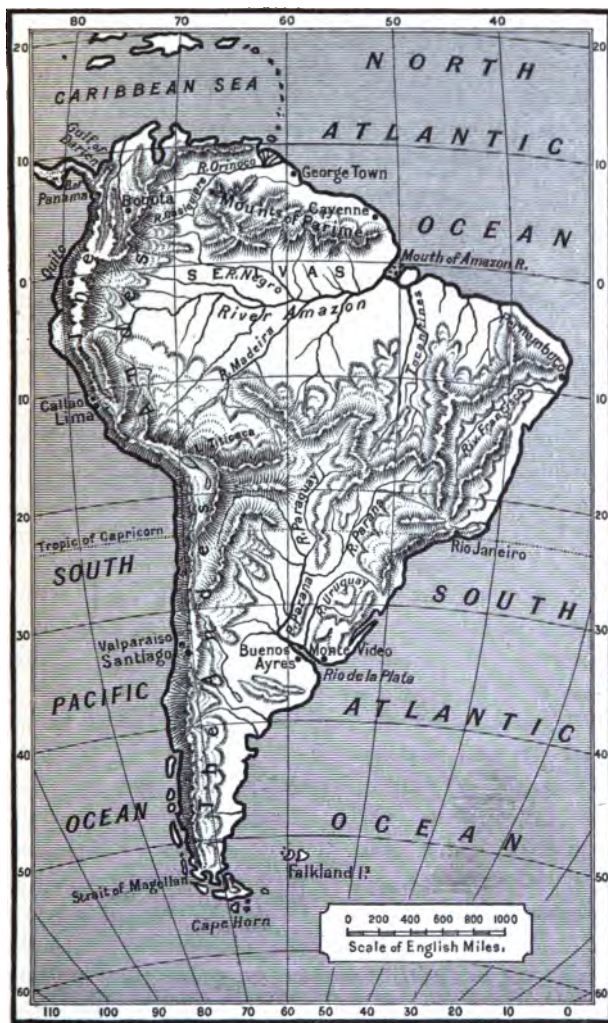


## **SOUTH AMERICA.**

### **52.—SHAPE, POSITION, AND BUILD.**

**1. Shape and Position.**—The shape of **South America** is the simplest of all the continents. It is a right-angled triangle. The right angle—called Cape St Roque—runs out right into the middle of the Atlantic Ocean, a little south of the equator. To windward of the north coast lies the North Atlantic Ocean ; to windward of the south coast lies the South Atlantic Ocean. Across the North Atlantic blow steadily, day and night, from year's end to year's end, the north-east trade-winds ; and as they cross the warm seas of the Torrid Zone, they carry with them millions of tons of vapour. Across the still broader belt of the South Atlantic blow the south-east trade-winds ; and these carry with them still larger supplies of rain. Both sets of winds strike upon the coast of South America at a right angle—the largest angle at which a wind can strike a coast. Both come laden with moisture, and bring to the continent, through the whole year, the largest supplies of rain that are given to any part of the world.

**2 Build of South America.**—The build of South America is almost as simple as its shape. The **Andes**, on the west coast—the most remarkable range on the globe for its continuity of height—runs through the whole continent, from Cape Horn to the Isthmus of Panama. Starting from the south-eastern coast, we have ranges of mountains running parallel with each other, and between each pair of ranges deep and wide valleys, through which flows a mighty stream. Then, in the north a wide plain ;



**Map of South America.**



in the middle one of the largest, and certainly the richest plain on the face of the globe; and in the south a wide plain again. In fact, South America is the **Continent of Plains**. A long range of high mountains, a number of secondary ranges, then great plains,—such is the simple build of South America.



Section of South America.

**3. Results of this Shape, Position, and Build.**—What do we find? We find, in front of the continent, two of the largest evaporating surfaces of sea in the Torrid Zone. We find two great systems of trade-winds, carrying millions of tons of rain, perpetually crossing these surfaces. We find these winds striking the coast at right angles. We find them blowing against the sides of high ranges of mountains, forced by them up into the cooler air, and thus—their moisture condensed—forced to send down enormous showers of rain. We find them crossing range after range of mountains, leaving always between each pair of ranges a mighty river, until, at last, they arrive at the most powerful condenser of all—the Andes. Here the last drop of moisture is wrung from them, and they cross the Andes as dry winds. Hence, on the west of the Andes, we find a string of rainless deserts. Seeing all this, what may we expect? We find the largest supply of rain-bearing winds in the world, and the highest condensers. We should expect, then, the largest river in the world, and the largest forest in the world. And we have them. The **Amazon**, which flows—almost right along the equator—through the Great Plain of South America,

is the largest river in the world. The **Selvas**, which cover with trees and undergrowth nearly a million of square miles, form the richest plain in the world.

**4. The Andes.**—The word **Andes** is said to be derived from an Indian word *anta*, which signifies *minerals*; and there is no chain in the world so rich in silver and copper. The Andes forms one of the best marked and longest ranges on the face of the globe. But, indeed, these mountains are not one range: they are in some parts two; in other places three; in one part four; and these ranges are remarkable for their strict parallelism. In some parts they form knots, from which again strike out high ranges at no great distance from each other. The whole is a mighty rampart, with an average height of 12,000 feet, and a breadth of from 20 to 400 miles. The side that faces the Pacific is the steepest; towards the east the mountainous table-land goes down by gradual stages into the broad plains of the interior. This mountain-system is also remarkable for the large number of active volcanoes that rise from it: there are said to be about 130. No other mountain-chain has so many; and the mighty range, with its sky-cleaving volcanic peaks, forms a splendid frame for the vast Pacific. The highest is **Aconcagua**, which towers to the height of 23,290 feet. The highest table-land within the range is the **Plateau of Titicaca**, which is more than 12,000 feet above the level of the ocean. Here is a non-oceanic basin, with its own lakes and rivers; with islands in the lake and towns upon them; and with one of the oldest civilisations in the world.

**5. The Amazon.**—(i) The **Amazon** is the largest river in the world. In the vastness of its main trunk, in the size of its branches, in the volume of its waters, in its power

over the ocean, it is the king of rivers. It is in so many respects like an inland sea that it has been called the "Mediterranean of South America." It rises in Lake Lauricocha, on a high table-land, where the traveller is in sight of the Pacific. Thus this mighty stream may be said to span the whole continent from the Atlantic to the Pacific. Let us fancy that the whole of Russia—instead of being drained by more than ten large rivers—were



Bark-Boat of the Amazon.

drained by one river! Then we can get a notion of the enormous basin of the Amazon. The main stream is about 4000 miles long; and it is navigable for more than 3000 miles. It draws tribute of water, from the north and from the south, along more than  $20^{\circ}$  of latitude—and that from the region of the world best supplied with rain. Its tributaries may be counted by the hundred; those larger than the Rhine by the dozen—those larger than the Thames by the score. The largest tributary is

the Madeira, a river about ten times as long as the Thames.

**6. The Amazon.**—(ii) The Amazon, in fact, is not so much a river as a labyrinth of streams—a vast network of rivers—an inland fresh-water sea, branching in all directions, and filled with islands. It has direct water communication—by means of the large natural canal, the Cassiquiare (a stream broader and deeper than the Rhine)—with the Orinoco; and a portage of three miles connects some of its southern tributaries with the basin of the La Plata. Thus the river-system of South America is the richest and most highly developed in the world. When a short canal has been made between the two basins, and steamers have been placed on the chief tributaries, it will be possible to go from Buenos Ayres to the mouth of the Orinoco entirely by water. In fact, the Amazon, even now, has water communication with every country in South America except Chile. The ocean-tide goes up nearly 500 miles; and thus we have a surface-force carrying up ships and boats twice a-day. Connected with this fact is another,—that the wind almost always blows up the stream, and thus helps the tides. So enormous is the volume of water thrown into the ocean by the Amazon, that fresh water can be had 150 miles out at sea: the weight of the river “drives back the sea, as such, out of sight of land.”

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**va'-pour**, water drawn up by heat in the form of gas.  
**con-tin-u'-i-ty** of height, unbroken stretch of height.

**span**, stretch across.  
**port'-age**, carrying of goods. (I. *por-târe*, to carry.)

## 53.—RIVERS, PLAINS, AND LAKES.

1. **The Other Rivers.**—(i) The two largest rivers, after the Amazon, of South America, are the **Orinoco**, and the **La Plata** (or River Plate) with its mighty tributaries, the **Parana** and **Paraguay**. . . The Orinoco is the great water-way of the northern regions of South America. It rises on the low watershed—the most remarkable in the world—which lies between its waters and those of the **Rio Negro**, the chief northern tributary of the Amazon. This watershed is remarkable, because it does not divide but joins the waters of the two basins. The natural canal which joins them, called the **Cassiquiare**, is broad enough and deep enough to float a first-class frigate. It is remarkable for its numerous windings, and for the magnificent curve with which it sweeps round the base of the Parime Mountains. In fact, its source and its mouth are almost in the same longitude. It sees in its course some of the largest plains in the world, some of the grandest forests; and it pushes into the sea, by fifty channels, its vast mass of green and milk-white waters, which form a vivid contrast to the deep indigo-blue of the North Atlantic.

2. **The Other Rivers.**—(ii) The La Plata, which is really a river-mouth formed by the junction of the Parana and Uruguay, is the widest river in the world. It is 62 miles broad at Monte Video, and it discharges more water into the ocean than any other river in the world, with the exception of the Amazon or the great African Congo. The Parana or Parana-Paraguay has been justly called the Mississippi of South America. It is fed by the tropical rains of Brazil on the east, and by the melting snows of the Andes on the west.

**3. The Selvas.**—The region called **The Selvas** is the largest forest-region in the world. It stands on the middle Amazon, and extends along both sides of the river for about 1200 miles from east to west, and 800 from north to south. At one central point one might draw a circle with a radius of nearly 1000 miles; and within that circle nothing but trees, trees, trees! This is the world-region of the densest and richest forest-life! There are more trees, and more large trees, than in any other part of the world; and there are also more different kinds of trees. Think of a pathless and impenetrable forest nearly twenty times as large as England! Forest upon forest of gigantic trees, lifting their lofty heads into the air; and joined by a chaos of bush-ropes and climbing-plants—of the thickest matting of creepers and climbers interlacing with their woody ropes and cables the trunks and the branches of the forest giants. Both the plants and animals of this world of trees take the character of creepers and climbers. Jasmines, nettles, and even palms, begin to climb, to twist, and to twine. Some coil like snakes around the nearest trunks; some join to form cables of many strands; some trail along zigzag fashion; and some grow in the shape of a mighty ladder leading to a dizzy height above. It is above this thick canopy of undergrowth that the flowers and fruit of the forest-trees rise—soaring above this gloomy air to the embraces of the light and the heat. Everywhere there is a solemn and awful stillness—a stillness which appals the traveller and weighs heavily on his heart. A shriek of anguish—the crash of a falling tree—the cry of some monkey that has fallen into the clutches of a serpent—the horrible din of the “howlers” (a kind of ape) at sunrise and sunset,—these are almost the

only sounds that break the dismal silence. Were a house of stone—the stones fastened by iron clamps—to be built in this region of overpowering vegetable force, the stones would be torn from each other by the growth of plants within six months, and the house would be overgrown, through and through, by thousands of plants and creepers



Cape Froward, Straits of Magellan.

**4. The Plains.**—South America is the **Continent of Great Plains**. As there are in the continent three great rivers, so there are three great plains or river-valleys. These three great plains are the **Llanos**, or Plain of the Orinoco; the **Selvas**, or Forest-Plain of the Amazon; and the **Pampas**, or Plain of the La Plata. But these three plains are, indeed, but one mighty plain, which extends from the extreme north to the farthest south of

the continent—from the mouth of the Orinoco to the Straits of Magellan. They are one plain; for, between the Orinoco and the Rio Negro there is a water connection by means of the Cassiquiare; and, between the headwaters of the Madeira, the largest tributary of the Amazon, and those of a tributary of the Paraguay, there is a portage, over quite low land, of only a few miles. Thus the interior of South America is one vast and fertile plain, traversed by the richest and most highly developed system of rivers in the whole world.

**5. The Llanos.**—The Llanos of the Orinoco are a set of vast plains with an area about twice as large as that of the British Isles. So level is a large part of them, that, in some districts, in areas of about 500 square miles, no part can be found that is even a single foot higher than the rest. They are inundated at one time, and burnt up at another. During the dry season, they are a desert; in the rainy season, they are covered with the most luxuriant vegetation. The view upon these llanos is like the view upon mid-ocean: nothing but sky and grass, grass and sky. A boundless expanse of meadow, fresh and smooth as the trimmest lawn, troops of horses and countless herds of cattle, clumps of towering palms, the delicate feathery foliage of the mimosa, beautiful tints of green and blue and purple in wondrous blending—such is the scene that spreads itself before the eye of the delighted traveller. In the dry season, the plain is a dreary expanse of hard and barren soil; the alligator and the water-boia lie plunged in the mud in a deep summer sleep; until, when the rain has come, “the dull tawny surface of the parched savannah changes as if by magic into a carpet of the liveliest green, enamelled with thousands of flowers of every colour. The moist clay, slowly heaving, bursts asunder, and from the



tomb in which he lay imbedded arises a gigantic water-snake or a huge crocodile. The newly formed pools and lakes swarm with life; and a host of water-fowl—ibises, cranes, and flamingoes—make their appearance to regale themselves on the prodigal banquet."

**6. The Pampas.**—The **Pampas** in the Argentine Republic are grassy treeless plains which stretch for several hundred miles west of the Parana. In some directions they are nearly 1000 miles long. For nearly two hundred miles west of Buenos Ayres, they are covered, at certain seasons of the year, with a forest of tall thistles; while, further west, for about 400 miles more, they form "a seemingly interminable ocean of grass and flowers." These plains are filled with a dread and solemn stillness—a stillness as of the ocean when not a breath of wind is blowing; and this solemn silence is broken only, now and then, by the cry of a bird or the low roar of the jaguar. Nearer to the Andes, the ground rises; and the traveller meets with belts of shingle, and barren sandy plains, with here and there a few prickly shrubs and dwarf trees.

**7. The Lakes of South America.**—Compared with North America, the Southern twin-continent is singularly destitute of lakes. Whereas, of all the continents in the world, North America possesses the largest, and the largest number of lakes, South America has very few; and even the largest is not for a moment to be compared in size with Lake Superior. The largest lake in South America is **Lake Titicaca**. It stands on the table-land of Bolivia, at a height of 12,500 feet above the level of the sea. It is studded with many islands; and on these islands grew up—at an elevation of more than two miles—the rich civilisations of the old Peruvian peoples. The lake is nearly as large as Lake Ontario, and about fourteen times

as large as the Lake of Geneva. The whole of the table-land is, like that of Tibet, a basin with only inland drainage; but, unlike Tibet, there existed here for many centuries populous towns, civilised peoples, and arts, skill, and knowledge of the most varied kinds.

**8. Volcanoes.**—It is worthy of note that the Pacific Ocean is surrounded by a vast girdle of volcanoes. This frame of burning mountains is nowhere more continuous or so well marked as in the Andes of South America. The Andes contain more than sixty volcanoes, about thirty of which are still active. The road leading to the city of Riobamba, in the State of Ecuador, is “an avenue flanked by fifty volcanoes, on an average as high as Mount Etna, three of them emitting volumes of smoke, and all of them crowded into a space not much greater than the distance between London and Dover. The most famous is *Cotopaxi*—famous not only for the symmetry of its shape and the beauty of its cone, which “is turned out as with the lathe,” but for its great height, which amounts to nearly 20,000 feet. When in eruption, it shoots its contents aloft to a height of 3000 feet above its crater; and the thunder of the eruption is heard at a distance of more than 600 miles,—or as far as from London to Berlin.

**ca'-bles**, ropes.

**strands**, the strings of which ropes are made.

**can'-o-py**, covering.

**in'-un-da-ted**, flooded; flowed over by waves. (L. *unda*, a wave.)

**lux-u'-ri-ant**, exceedingly abundant.

**sav-an'-nah**, prairie-land.

**em-am'-elled**, dotted over with various colours.

**re-gale'**, feast.

**prod'-i-gal**, very plentiful.

**in-ter'-min-a-ble**, boundless; without end. (L. *in*, not; and *terminus*, a boundary.)

**des'-ti-tute**, in want; not having.

**stud'-ded**, dotted.

**e-mit'-ting**, sending forth. (L. *e*, out of; *mittere*, to send.)

**sym'-met-ry**, regularity.

1. **Creepers and climbers**, plants which cannot stand alone, but creep up and twist round trees and other plants. Among the creeping and climbing animals are serpents, sloths, and monkeys.

2. **Jasmine**, a kind of plant, many species of which have very fragrant flowers.
3. **Mimosa**, a tree belonging to the same class as the acacia and the sensitive plant. It is distinguished for the beauty and gracefulness of its leaves.
4. **The old Peruvian peoples**. When discovered by the Spaniards, the natives of Peru were in a highly civilised condition. They were ruled over by a race of kings called Incas, who were said to be the children of the Sun. They worshipped the Sun, and had numerous temples erected to him, in which everything was of pure gold.
5. **Lathe**, a machine for turning and shaping articles of wood and metal.
6. **Crater**, the mouth of a volcano from which the smoke, flames, ashes, and lava come forth. It is generally shaped like a bowl or cup. (*L. crater*, a bowl.)

#### 54.—CLIMATE, PRODUCTIONS, AND MINERALS.

1. **Climate**.—By far the largest part of South America lies within the tropics; and its greatest breadth lies only a little south of the equator. Accordingly, in the low lands, the heat is very intense. But this intense heat is, in the river-valleys, much modified by breezes from the ocean. "The basin of the Amazon is shaded with lofty woods; and a cool breeze from the east, a minor branch of the trade-wind, ascends the channel of the stream, following all its windings, almost to the foot of the Andes. Hence this region, though under the equator, and visited with almost constant rains, is neither excessively hot nor unhealthy." . . . But, in fact, we find within the wide limits of this vast continent, all kinds of climates, from the moist heat of an equatorial region at the level of the sea, to the perpetual snow on the sides of the higher Andes. Everywhere the low latitudes are corrected, or may be corrected, by the high altitudes. "In the tropical region of South America," says an able writer, "Spring, Summer, and Winter are seated on separate thrones, which they never quit. The heat is always scorching in the plains, owing to their low level, and the

cold is always polar in the higher ridges of the Andes ; while, on the intermediate table-lands, the temperature is always mild. The inhabitants of Quito, though living under the equator, enjoy just such a climate as their ancestors were accustomed to in Spain."

**2. Vegetation.**—The two conditions of rich and luxuriant vegetation are great heat and great moisture ; and, as we have seen, the mighty valley of the Amazon possesses these two conditions in the highest possible degree.

This valley has, in fact, been called "a great natural forcing-house." . . The tropical region of South America is of course by much the richest and most luxuriant ; and the three most striking characteristics of that region are its flowering trees, its palms, and its lianas. There are in no other parts of the world such palm-forests as are found



Plant-Map of South America.

in South America. The waters of the tropical region, moreover, bear the splendid *Victoria Regia*—the most magnificent of all the water-lilies of the world. Another plant characteristic of South American forests is the cinchona, which yields the celebrated medicine called "Peruvian bark," or quinine. High up, on the mountain-slopes, we find the trees of the temperate zones ; and, among them,

a magnificent pine called the *Araucaria*. In addition to these, we find india-rubber trees, rosewood, mahogany, dye-woods, and others ; besides coffee, cocoa, cotton, sugar,

tobacco, bananas, and other products of tropical, subtropical, and temperate regions. In short, the vegetable wealth of this rich continent surpasses that of every other continent on the face of the globe.



Chile Pine.

**3. Animals.**—While the vegetable world of South America is strong, the animal world is weak. The wild beasts are small, and afraid of man. Instead of the tiger of the Old World, we find the jaguar ; instead of the lion, the weak and cowardly puma ; instead of the lordly elephant, the pig-like tapir ; and instead of the tall camel and dromedary, the llama and alpaca. The forests are the abode of innu-

merable monkeys, most of which have prehensile tails, which serve the purpose of a fifth hand. The largest bird is the nandu, or American ostrich ; the next largest the condor of the Andes, which sometimes soars to the height of 22,000 feet . . . The lower forms of animal life—especially insects—are both very numerous and very various. Insects are, in fact, more numerous and more

brilliant than in any other continent. In the stillness of the evening, the hum of them may be heard on board ship miles from the shore.

**4. Minerals.**—The chain of the Andes is so rich in metals, especially in silver and gold, that its name is supposed to be derived from the Indian word *anta*, which means *minerals*. Both gold and silver are found in almost all the Andean States. Copper is also one of the most frequent ores, and is found in large quantities. The silver mountain of Potosi is said to have yielded silver to the value of £300,000,000 sterling. No country in the world is so rich in precious stones as Brazil; and diamonds, emeralds, sapphires, rubies, and other precious stones are found in the mines of that rich country.

**5. Peoples.**—The natives of South America are Indians, who were subdued by the Spaniards at different times. The more civilised inhabitants of the continent are the descendants of the Spaniards and Portuguese. Then we find also a large number of negroes, who were imported as slaves to work in the mines and in the fields. Almost all the civilised peoples are to be found in a broad band which goes round the whole of the continent. The Spaniards chiefly hold the west and north coasts; the Portuguese settled, and still hold Brazil; while the native races are to be found everywhere, but more especially in the interior.

*in-tense*, severe; excessive.

*mod'-i-fied*, moderated; lessened. (L. *modus*, a measure; and *facere*, to make.)

*cor-rect'-ed*; set right; made up for.

*al'-ti-tude*, height above the level of the sea.

*po'-lar*, similar to that at the pole.

*pre-hen'-sile*, adapted for seizing or grasping. (L. *prehendere*, to seize.)

**1. Ancestors.** The inhabitants of Quito are mostly descended from the Spaniards, who took possession of the greater part of the coast of South America soon after it had been discovered.

2. **Forcing-house.** In temperate climates tropical plants are reared in glass houses, where a great heat is kept up so as to force them on.

3. **Lianas,** a general name applied to all creeping tropical plants.

4. **Araucaria,** a tree, the whole of whose trunk and branches is closely covered with prickly leaves. It grows to a great height, and has a splendid appearance.

5. **Jaguar,** an animal of the cat kind, almost as large as a tiger. It climbs trees well, and springs on the back of its victim as it passes beneath.

6. **Puma,** an animal of the cat kind, very like a panther, but smaller. It lives mostly on deer and wild cattle, and can be tamed. It is often called the cougar.

7. **Tapir,** a thick-skinned animal belonging to the same class as the elephant. It has a long upper lip somewhat resembling the elephant's trunk, but much shorter. With this it grasps branches of trees and herbage.

8. **The llama** is the mountain camel of South America. It has no hump. Its feet have two toes with strong nails, fitted for climbing mountains. It lives in flocks among the Andes, but has been tamed and used as a beast of burden by the people of Peru and Chile.

9. **Alpaca,** a small kind of llama, somewhat like a sheep, but larger. It is much valued for its fine wool, which is soft, silky, and very strong, as well as nearly a foot in length. Cloth for ladies' dresses is made from the wool.

10. **The nandu,** or American ostrich, is only about half as large as the real ostrich, though much like it in general shape.

11. **The condor,** or American vulture, is found among the Andes. It soars high into the air, watches all the ground below for its prey, and then comes down like an arrow. It never attacks living animals, unless they are worn out with sickness or old age.

12. **Insects.** Among the brilliant insects of South America are the fire-flies, many of which give out light enough to light up a dark room.

13. **Emeralds,** precious stones of a lovely green colour.

14. **Sapphires,** precious stones of various shades of blue.

15. **Rubies,** precious stones of a brilliant red colour.

## 55.—POLITICAL DIVISIONS.—I.

1. **Political Divisions.**—There are in South America thirteen different States. Most of them are Spanish republics—States which rose against the hard and greedy rule of Spain at different times, won their freedom, and set up on their own account. These Spanish States are the republics of Venezuela and Colombia in the north; of Ecuador, Peru, Bolivia, and Chile in the west; the

Argentine Confederation and the republics of Paraguay and Uruguay in the east. The only State ruled by a monarch is the empire of Brazil; and the emperor belongs to the royal house of Portugal. Then, on the north coast, we find three colonies belonging respectively to Great Britain, Holland, and France: these are British, Dutch, and French Guiana.

**2. United States of Venezuela.**—Venezuela is a country of about twice the size of France, but with a population which is under two millions—that is, smaller than the population of Paris. Its chief river is the Orinoco; and most of its land consists of the wide “seas of grass” called **Llanos**. The Orinoco enters the sea by a delta of fifty channels, only a few of which are safe for vessels. The name Venezuela means “Little Venice.” When the Spanish sailors sailed into the Lake of Maracaibo, which is the largest sea-water lake in South America, they saw towns and villages built on piles above the waters of the lake. “Look!” they cried, “there is Venice! A new Venice! A little Venice! Venezuela!” And the name remains, and still clings to the country. . . The capital of the country is **Caraccas**, a city of about 50,000 inhabitants, on a table-land about half a mile above the level of the sea.

**3. United States of Colombia.**—This country is about four times as large as the British Isles. The eastern part of it includes portions of the llanos; the western lies among three ranges of the Andes, and includes the basin of the mighty Magdalena. The upper table-lands enjoy a cool and healthy climate. . . One of the nine States which make up the United States of Colombia is the Isthmus of Panama; and this important possession must one day make of Colombia a very important country.



M. de Lesseps, the great Frenchman who, by cutting the Suez Canal, joined the Mediterranean to the Arabian Sea, is now engaged in cutting a canal through this isthmus, and thus connecting the two greatest oceans of the world—the Atlantic and the Pacific. When this great feat of engineering will have been completed, the route from England to Australia will be shortened by about 2000 miles; and most of the ocean traffic of the world's commerce will be entirely changed. . . At present the Panama railway conveys passengers across this famous isthmus. . . The capital of the country is **Bogota**, which, standing as it does on a table-land more than 8000 feet above the ocean, enjoys a climate of perpetual spring.

**4. Ecuador.**—The **Republic of Ecuador** received its name from the fact that the equator runs through the north of it. The country is traversed by double ranges of the Andes; and between the two lies the lofty table-land of **Quito**, which is about 10,000 feet high. The city of Quito (which has a varying population of from 50,000 to 80,000) is the capital of the State. This city, which is called “Evergreen Quito,” is a beautiful town in the midst of lovely gardens, and surrounded on all sides by magnificent mountain-peaks, some of which are active volcanoes. . . The port of Ecuador is **Guayaquil**, which exports chiefly cocoa, vegetables, ivory, and india-rubber. “Here,” says an able writer, “the climate is hot, moist, and pestilential. It is scarcely possible to keep reptiles out of the beds; and candles are burnt in lanterns, as otherwise they would be extinguished by insects.” . . West from Ecuador lie the **Galapagos Islands**, which consist chiefly of groups of dead volcanoes, of which there are more than two thousand. The shores swarm with turtles, which are killed and exported in large numbers.

**5. Peru.**—Peru is the most important and the largest of the Pacific States of South America. It lies on both sides of the Andes. It is in size equal to about ten Englands. In the south two, and in the north three chains of the Andes traverse this vast country, which presents in its landscapes the most vivid and varied contrasts. Barren desert, dense forests; low plains, the loftiest and most rugged mountains; calm and stormless seas, raging torrents down the mountain-sides—such are a few of the contrasts that meet the eye of the traveller. . . The Peruvians are a people of enterprise and foresight; they have seized on the left bank of the Amazon, placed steamers on that river, and have begun a thriving traffic upon it. . . The chief wealth of the country now consists in guano. In older times it consisted in silver; and the silver-mines of Potosi and Pasco made silver so common and so cheap that the tires of wheels, horse-shoes, basins, pots and pans, were made of it, and this precious metal was as common among the poorest as iron is with us. The other exports are cinchona or Peruvian bark, saltpetre, and the wool or hair of the llama. . . The capital is Lima, the largest city in South America west of the Andes. . . There are more than 1200 miles of railway in this State; and it is proposed to continue the line from Lima to the Andes and on to the head-waters of the Amazon. . . In Peru we find the highest city in the world, Pasco—a silver-mining town, which stands at the height of 13,720 feet above the level of the ocean.

**6. Bolivia or Upper Peru.**—Bolivia is an inland State, with a very small piece of coast-line. It contains the greatest extent of elevated table-land in the whole continent; and also some of the loftiest mountains in the New World. The slopes of the lower mountains, which

enjoy a pleasant and even genial climate, are very fertile, and constitute a chief part of its great wealth. . . The highest table-land in the country is the Plateau of Titicaca, which is more than 13,000 feet above the level of the sea. The eastern shore of the lake is still inhabited by tribes of Peruvian Indians. On this high table-land stands the city of **La Paz**, the largest town in Bolivia, with about 80,000 inhabitants. . . The chief wealth and most important exports of the country consist in the precious metals, llama wool, and cocoa. . . The capital of the country is **Sucre**, a town of about 25,000 inhabitants, upon a lofty table-land, more than 9000 feet above the ocean-level. . . Bolivia seems destined to remain an inland country for some time; for Chile has seized her only port on the Pacific, and her only outlets to the other countries of South America are by the rivers Madeira and Paraguay.

**feat**, undertaking.

**traf-fic**, trade.

**pes-ti-len'-tial**, causing pestilence or disease.

**viv-id**, clear; striking.

**en'-ter-prise**, courage in overcoming difficulties.

**fore'-sight**, caution; prudence.

**ge'-ni-al**, pleasant.

**con'-sti-tute**, form.

1. **Confederation**, a number of states joined together in a league. (*L. con*, together; *federäre*, to league.)

2. **Piles**, wooden beams driven into the ground.

3. **Cocoa** (*co'-co*), ground, is used as a drink like tea or coffee.

4. **Guano**, birds' dung—a rich manure.

5. **Saltpetre**, nitre. It is much used in the manufacture of gunpowder.

## 56.—POLITICAL DIVISIONS.—II.

1. **Chile**. — The long narrow belt of land on the Pacific which is called Chile, and which lies at the foot of the Andes, is the most prosperous and enterprising

of all the South American republics. It is in extent nearly as large as the British Isles, though its population is not greater than two millions. The Andes at the back of Chile form a single chain, which rises into the sky at the distance of about 100 miles from the Pacific, and which contains a large number of active volcanoes. The northern part of the country is filled with the desert of Atacama. "Imagine," says a traveller, "an immense



Valparaiso.

plain where you can see no sign of life, where you meet with neither birds nor insects, where no plant grows, where the stillness of the grave is broken only by the raging of the wind, where the ground consists of limestone, and the wearied eye is tormented by the fine dust and the constantly bright sun, where, finally, you may at any moment meet the skeleton of a quadruped or the remains of a human body. This is the desert of Atacama." The territory of Chile reaches down to the

Straits of Magellan, and even into the west of the "Land of Fire," or Tierra del Fuego. . . Not far from the coast is the island of John or Juan Fernandez, where Alexander Selkirk, a Scotchman, lived all alone for four years in the beginning of the eighteenth century; and it is this adventure of Selkirk's that is believed to have suggested to Defoe his 'Life of Robinson Crusoe.' . . The want of navigable rivers has been supplied in Chile by railways, of which there are nearly 1200 miles at present. The chief wealth of the country consists in copper and silver. **Santiago** is the capital and the largest town; and it is also the largest town in the whole of South America. Its population amounts to 390,000—or nearly the size of Manchester. The second largest town is its port **Valparaiso** (the Vale of Paradise), which has a population of nearly 200,000—or not quite so large as that of Bristol.

**2. The Argentine Confederation.**—The **Republic of La Plata** or the Argentine Republic is the second largest State in South America. It is equal in size to ten Great Britains; and yet its sparse population is not equal to half that of London. A large part of the country is a dead level; and, no doubt, as the population and commerce increase, railways will be made, because they will be made so cheaply. The great southern treeless plains called the **Pampas** stretch in all directions through the State—in some directions for nearly 1000 miles. Part of the north is filled by the plains of the **Gran Chaco**. These plains, in the rainy season, look like an ocean studded with green islands. In some parts there are boundless forests of palms; in others groves of mimosas; while, everywhere, tall trees are knit together by countless climbers and creepers, which form an endless overhanging curtain of green, studded with countless flowers of every hue.

"One can wander for days together beneath the shade of these natural bowers, through which glimpses are but rarely obtained of the deep azure of the sky. . . The capital of the state is **Buenos Ayres**—a word which means *good airs*. It is a city not quite so large as Bristol. The sea beside this port is so shallow that vessels have to unload at a distance of twelve miles. . . The chief wealth of the State consists in its countless herds of cattle and horses, and flocks of sheep; and, though metals are exported, the main articles of commerce are hides, horns, and salt beef. . . The chief water highway of the country is the **Parana**, which is a slowly flowing stream, seldom less than a mile in width, and in some places as much as ten.



Monte Video.

**3. Uruguay.**—This small republic of rolling plains of grass is about twice the size of Ireland, but has a population which is only about half the population of Glasgow. Its

chief—almost its only—wealth is its splendid pastures, which feed immense herds of cattle, droves of horses, and flocks of sheep. The capital and chief port is **Monte Video**, a city not quite so large as Nottingham. Hides, horns, tallow, wool, and salted and dried beef, form its chief articles of export.

**4. Paraguay.**—This country, like Bolivia, has no sea-coast. It is a little larger than England and Wales; but the population it supports is not much larger than the whole population of Greenwich. Most of the country lies between the two great rivers Parana and Paraguay; and, where their slow currents meet, the country is a marsh for thousands of square miles. These marshes are called by the natives "The Endless." The forests of Paraguay are noted for their splendid timber, and the banks of the river are clothed with the most magnificent palms. The capital is **Assuncion**, a small town on the left bank of the Paraguay. Its chief—almost its only—export is yerba tea.

**5. The Empire of Brazil.**—(i) The empire of **Brazil** is in shape very similar to South America itself. It is nearly as large as the whole of the United States, and not very much smaller than Europe. There are two well-marked natural divisions in the country. The first is the mighty and fertile plain of the Amazon—one of the most fertile plains in the world; and this fills about two-thirds of the whole State. "So deep is the alluvial deposit over much of this valley, that the inhabitants of immense tracts have never seen a stone." The second consists of the uplands of the south. This region is crossed by ridges of high hills and ranges of lofty mountains—sierras or cordilleras. With the Amazon and its large number of mighty tributaries, Brazil is the best-watered country on the face of

the globe. No part of the world is richer in precious stones. The province of **Minas Geraes** (a word which means *general mines*) is the richest in precious stones and gold. Of diamonds alone these mines have furnished to the value of £25,000,000. Quicksilver, iron, and especially copper, are also very abundant.

**6. The Empire of Brazil.**—(ii) This vast empire is far from being densely populated; there is merely a fringe of people round its long coast. There are, on the whole, not three persons to the square mile. Hence there are very few large towns. There are only three towns in the whole of the vast empire with a population of more than 100,000. These three towns are **Rio de Janeiro**, **Bahia**, and **Pernambuco**. Of these, Rio, which is the capital, is the largest. It possesses a population of about 300,000, and is therefore as large as Sheffield. Rio is the largest port, and the second largest town, in South America. It lies on the shores of a beautiful land-locked bay, which is approached through the midst of clusters of lovely, mountainous, and wooded islands. The romantic mountain-scenery of the bay is said by many to surpass the view of the Bay of Naples, and even of the Golden Horn; and the city itself is sometimes called a City of Palaces.

**7. Guiana.**—This northern country, which lies almost on the equator, is in the possession of three Powers—Great Britain, Holland, and France. The low-lands are hot and moist; but, farther back, there are high table-lands and lofty mountains, which are clothed with the most magnificent trees of every kind, and inhabited by birds and beasts of the strangest and most varied description. It was through these forests that Waterton, the great naturalist, roamed; and in these he gathered his most interesting specimens of beast and bird. The staple



product of all the Guianas is sugar, which, with rum and molasses, is largely exported. In the rich low-lands, as many as thirty crops of rice have been raised in succession, without the aid of manure; and even the soil has been exported to other countries. . . **British Guiana** occupies almost the whole basin of the Essequibo. Its capital is **Georgetown**, with a population of 37,000, on the river Demerara. . . **Dutch Guiana** is a poor colony, because of the deficiency in labour. Its capital is **Paramaribo**, near the mouth of the Surinam. Its streets are bordered with rows of orange, lemon, and tamarind trees; and every house stands in its own lovely garden. . . **French Guiana** has been used by the mother country chiefly as a place of banishment for convicts; and the poisonous marshes round the capital, **Cayenne**, have been fatal to many a poor political prisoner, who thought he was serving his country when he rose against the Government of the day. The population of the whole colony—and it is as large as three Yorkshires—does not amount to 27,000,—the population of a small English town. Its exports are gold, cacao, and pepper.

**pros'-per-ous**, flourishing.

**sug-gest'-ed**, brought into mind.

**sparse**, scanty; thinly spread.

**land'-locked**, almost completely sur-

rounded by land.

**de-fi'-cien-cy** in la'-bour, scarcity of good work and workmen.

1. **Active volcanoes**, those whose fires are still burning and in which eruptions still occur.

2. **Tierra del Fuëgo**, *land of fire*. It is so called from the number of volcanoes it contains.

3. **Sierra** is a Spanish word meaning a *saw*, and is applied to a saw-like ridge of mountains.

4. **Cordillëra** is a word which means a *chain* or *range*.

5. **Molasses**, treacle—the refuse of sugar.

6. **Tamarind**, the fruit of a large tree which grows wild in Asia and Africa, but is now grown in South America.

7. **Cacao**, same as cocoa.

57.—THE SWINGING BRIDGE OF THE  
APURIMAC.

The Apurimac is one of the head-waters of the Amazon, a large and rapid stream, flowing in a deep valley, or rather, gigantic ravine, shut in by high and precipitous mountains. Throughout its length it is crossed at only a single point, between two enormous cliffs, which rise dizzily on both sides, and from the summits of which the traveller looks down into a dark gulf. At the bottom gleams a white line of water, whence struggles up a dull but heavy roar, giving to the river its name *Apurimac*, signifying "the Great Speaker." From above, the bridge, looking like a mere thread, is reached by a path which on one side traces a thin white line on the face of the mountain, and down which the boldest traveller may hesitate to venture. This path, on the other side, at once disappears from a rocky shelf, where there is just room enough to hold the hut of the bridge-keeper, and then runs through a dark tunnel cut in the rock, from which it emerges to trace its line of many a steep and weary zigzag up the face of the mountain. It is usual for the traveller to time his day's journey so as to reach this bridge in the morning, before the strong wind sets in; for, during the greater part of the day it sweeps up the cañon of the Apurimac with great force, and then the bridge sways like a gigantic hammock, and crossing is next to impossible.

It was a memorable incident in my travelling experiences, the crossing of this great swinging bridge of the Apurimac.

Our road to the bridge was circuitous and precipitous,

leading down the steeper side of the ridge of La Banca, where it seemed hardly possible for a goat to find foothold. It was a succession of abrupt zigzags, here and there interrupted by a stretch of horizontal pathway. To see our cavalcade, it was necessary to look up or down, not before or behind. It was like descending the coils of a flattened corkscrew. In many places the rocks encroached on the trail, so that it was necessary to crouch low on the saddle-bow to pass beneath them, or else to throw the weight of the body upon the stirrup overhanging the declivity of the mountain, to avoid a collision. The most dangerous parts, however, were where landslips had occurred, and where it was impossible to construct a pathway not liable at any moment to glide away beneath the feet of our animals. The gorge narrowed as we descended, until it was literally shut in by precipices of stratified rock strangely contorted; while huge masses of stone, rent and splintered as from some terrible convulsion of nature, rose sheer before us, apparently preventing all exit from the sunless and threatening ravine, at the bottom of which a considerable stream struggled, with a hoarse roar, among the black boulders.

Finally, the ravine became so narrowed between the precipitous mountain-sides as barely to afford room for the stream and our small party. Here a roar, deeper, stronger, and sterner than that of the stream which we had followed, reached our ears, and we knew it was the voice of the "Great Speaker." A little further on we came in view of the river, and two or three low huts built on the circumscribed space where the two streams came together. Our muleteers were already busy in unloading the baggage, preparatory to its being carried across on the backs of the occupants of the huts.

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To the left of the huts, swinging high in a graceful curve, between the precipices on either side, looking wonderfully frail and gossamer-like, was the famed bridge of the Apurimac.

My companions and myself lost no time in extracting the measuring-tapes and sounding-lines from our baggage, and hurriedly scrambled up the rocky pathway to the bridge. It was in bad condition. The cables had slacked so that the centre of the bridge hung from twelve to fifteen feet lower than its ends; and then the cables had not stretched evenly, so that one side was considerably lower than the other. The cables on either hand, intended to answer the double purpose of stays and parapets, had not sunk with the bridge, and were so high that they could not be reached without difficulty; and many of the lines dropping from thence to the floor, originally placed widely apart, had been broken, so that practically they were useful neither for security nor for inspiring confidence.

We carefully measured the length and altitude of the bridge, and found it to be, from fastening to fastening, 148 feet long, and at its lowest part 118 feet above the river.

Our baggage was carried over the bridge, and the animals were then led across one by one, loaded, and started up the mountain. We led our horses over without difficulty, except in getting them on the bridge. But once fairly on the swaying structure, they were as composed as if moving on solid ground. Perhaps even to the lowest animal intelligence it must be apparent that the centre of the bridge of the Apurimac is not the place for antics, equine or asinine.

E. G. SQUIER.<sup>1</sup>

<sup>1</sup> From 'Peru.'

gi-gan'-tin, very large like a giant.

(Gr. *gigas*, *gigantos*, a giant.)

cir-cu'-it-ous, round about.

cav'-al-cade, a party on horseback.

strat'-i-fied, in layers. (L. *stratum*,  
a layer; *facere*, to make.)

con-tort'-ed, twisted. (L. *con*, to-

gether; *torquere*, to twist.)

cir-cum-scribed', narrowed. (L. *cir-*  
*cum*, round; *scribere*, to write.)

e'-quine, belonging to a horse. (L.  
*equus*, a horse.)

as'-in-ine, belonging to an ass. (L.  
*asinus*, an ass.)

1. Hammock, a swinging bed.

2. Gossamer, the fine threads of a spider's web.

## 58.—THE RAPIDS AND GORGE OF TUNKINI.<sup>1</sup>

A deep rent which we recognised as the bed of an ancient torrent, with the sand of which it was still strewn, divided the rocky wall, and ran in a gentle slope to the river. Descending by this road, we rejoined our canoes, and once more embarked. Notwithstanding the rapidity of the current, the water was calm, and for an hour and a half we continued our course without meeting with any obstacle. Then, however, a slight disturbance of the water made us aware that we were in the neighbourhood of a rapid, and in a few minutes hostilities were recommenced. According to the Antis, we were approaching a place called Sibucuni, which our rowers translated by *Traga-canoa* (swallow-canoe). In our circumstances, the conjunction of these two words was anything but reassuring. We therefore kept watch, ready to struggle for our lives with the perfidious element which had served us so many bad turns.

The unnatural aspect suddenly assumed by the river appeared to justify our apprehensions. The inclination of its bed was so apparent as to strike us with terror.

<sup>1</sup> On a tributary of the Amazon.

The broken rocks, heaped together with increasing wildness, as if to forbid our further passage, so affected our spirits, that we requested the rowers to land us as quickly as possible, not on the left shore—the shores had disappeared—but on the half-submerged rocks which had taken its place. We thus recommenced our scramble along the crests of the rocks; while the savages, who had provided themselves with lianas, tied them end to end, and by this means obtained cables long enough to enable them, by lying flat on the rocks, to guide the canoes down the torrent. A rapid, about three hundred yards in breadth, and furious in its turmoil of waters, terminated the descent of the Sibucuni, whose goodness to us had given the lie to its name. None of our canoes had been swallowed up in this gulf.

The place, nevertheless, had made such an impression on us, that, to prevent the recurrence of the danger we had escaped, we informed our rowers that we should continue along the rocks, and leave to them the care of guiding the canoes and rafts in whatever way they deemed best. This plan, which prudence and perhaps fear suggested, was unhappily impracticable. Below Sibucuni the river ran between perpendicular walls of rock, and all communication between ourselves and our canoes being completely intercepted, we were compelled to make an attempt to rejoin them. The descent was therefore resolved upon. Each, helping himself as he could with his hands and his finger-nails, and his staff, clinging to the angles of the rock, or slipping over its smooth surfaces, reached the bottom without accident.

According to the savages, it only remained to descend one more rapid before we found ourselves in calm waters. As, for the last two days, these rapids had become more

and more perilous, we thought it not unlikely that the last of them might be to our journey what the dessert is to the dinner, or the bouquet to the display of fireworks. This thought, coupled with the impossibility of avoiding the danger by disembarking and making our way along either of the shores, as we had previously been able to do, made us rather serious. It was with a perplexed air, and with such a feeling of nervousness that every sound grated on our ears, that we seated ourselves in our canoes, and once more launched into the stream.

The river, intrenched between two walls of freestone, was about sixty yards broad at this spot. As we advanced, it gradually became more and more contracted, until between one and two miles from Sibucuni it scarcely exceeded a dozen yards in breadth. There the double wall of rock suddenly sunk away. A belt of foam, above which rose a light mist, barring the bed of the river, warned us of the approach of danger. The eyes of the savages twinkled, the rowers bent to their strokes like jaguars about to make a spring. Those who steered half rose, and, with their nostrils inflated and their hair streaming in the wind, pressed firmly against the sides of the canoe the oar which served as a rudder. Then ensued a moment of feverish expectation and terrible anxiety, during which no one could foresee whether we should be able to descend the rapid in safety, or should be swallowed up by it. Like black snakes, slender and alert, our canoes glided into the whirlpool of foam and disappeared from view. The most resolute among us shut our eyes. A few seconds elapsed; then the hurrah of the savages announced the issue of the struggle—the rapid of Tunkini was safely passed.

Below this dangerous passage the river contracted still

more, and continued its course between two walls or dikes of basalt which succeeded to the freestone. The summits of these formations, covered with a dense vegetation, were joined one to the other by a network of lianas, which formed, at an elevation of some thirty feet, a dome of verdure impenetrable to the rays of the sun. It was some minutes before our eyes, dazzled by the light outside, became accustomed to the greenish obscurity of this gorge, the most remarkable work of nature that we had yet met with on our journey.

This natural tunnel or gorge might be somewhat less than a third of a mile in length, and about fifty feet wide, terminating in a luminous point like a star. Its walls were furrowed by vertical trenches, serving as beds or conduits to the little streams which fell from their summits into the river, with no other noise than a kind of gentle trickling. We counted in our passage through the gorge twenty-three of these pretty falls; in the unequal intervals between which we could see, in the dim light, now a compact group of little columns, now a truncated shaft; the incessant dripping of the foliage, drops of rain, and tears of dew, during an incalculable number of ages, having sculptured the basalt and produced the most charming accidents of architecture, the most fantastic arabesques, the most exquisite essays at ornamentation, which it would be possible for the imagination to conceive or the chisel to imitate. All these caprices of a natural art—all these flowers, leaves, and branches fashioned in stone by an invisible artist—seemed, by contact with the real leaves, whose shadows fell upon them, to participate in the mobility of the latter, and to vibrate with them as if they also were living things.

While we traversed this gorge—the fairy-like wonders



of which were such as one sees in the mist of dreams rather than in the clear light of day—we were tempted to bite our little finger to convince ourselves we were awake. The danger which surrounded us, however, was the ballast of reality, which brought us down from the heaven of sylphs and fairies, and kept us in the world of men. The river, rendered furious by its captivity within these basaltic walls, but concentrating its fury in the depths of its bed, throbbed in its whole mass, and caused the bottoms of our canoes to tremble under our feet. In the sensation we experienced there was as much of fear as of enthusiasm. It was one of those nervous emotions which mingle laughter and tears. Soon the current, already rapid, redoubled its speed; the parallel sculptures of the two walls grew confused; the star-like point, on which our eyes had been steadily fixed, grew larger and larger until it became a portal, opening to a wide extended space. With the swiftness of an arrow our canoes rushed out of the darkness of the gorge; passed, some twenty yards further on, the pass of Tunkini (a notch or gap between two masses of rock), and suddenly shot out into the open, flooded with air and sunshine. Henceforth the Cordillera was behind us. We had entered on the American plains. MARCOY.<sup>1</sup>

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con-junc'-tion, coming together. (L. <i>con</i> , together; <i>jungere</i> , to join.)	im-prac'-ti-ca-ble, not able to be performed or reduced to practice.
re-as-sur'-ing, cheering; comforting.	con-tract'-ed, narrowed. (L. <i>con</i> , together; <i>trahere</i> , to draw.)
ap-pre-hen'-sions, fears. (L. <i>ad</i> , to; <i>prehendere</i> , to seize.)	in-flat'-ed, widened out (with excitement).
half-sub-merged', half-sunken. (L. <i>sub</i> , under; <i>mergere</i> , to sink.)	in-cess'-ant, endless.
in'-un-dat-ed, flooded.	

1. What the dessert, etc.—that is, the end.

2. Sylphs, water-sprites.

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<sup>1</sup> From 'Travels in South America.'

## 59.—OCEANIA.—I.

1. **Oceania.**—The great world of islands which lies in the Pacific Ocean, east of the continent of Asia, is sometimes spoken of by the name of **Oceania**. The islands are mostly of two kinds—volcanic or coralline. The largest are of volcanic origin; and many of them contain large numbers of volcanoes, some of which are in constant activity. The coral islands have been built up by the ceaseless labour of the “coral insect.” The volcanic



Map of Oceania.

islands are high, rugged, mountainous, and very fertile; the coral islands are low and flat, with but a thin coating of soil, and generally girdled by a thin belt of cocoa-nut palms.

2. **Divisions.**—The island-world of Oceania falls easily into four great divisions. Between Australia and the south of Asia lies the Malay Archipelago or **Malaysia**, the richest in every respect of all the island groups on the

surface of the globe. This group is called **Malaysia**, because it is inhabited by the Malay race. . . East of this group lies **Melanesia**, or the Region of Black-Folk Islands. This group includes New Guinea—the largest island in the world, and a number of others which lie to the south-east of it, the best known of which are the Fiji Islands. . . East of Melanesia, again, lies the group called **Polynesia**, or the Region of Many Islands. . . North of Melanesia, again, lies the group known as **Mikronesia**, or the Region of Small Islands; and the best known of these are the Sandwich Islands, which, however, lie far away from the main body.

**3. Malaysia.**—The group called **Malaysia** includes some of the largest islands in the world. **Borneo** and **Sumatra** are much larger than Great Britain; **Java**, **Luzon**, and **Celebes** are each larger than Ireland. A volcanic belt, in shape like a horse-shoe, lies round Borneo; and in this belt there are no fewer than fifty active volcanoes. In fact, this part of the world is the region in which earthquakes are most frequent and most destructive, and volcanic agencies most active and on the largest scale. These islands, again, lying near the equator, and in the part of the world where there is the largest amount of heat and moisture, are extremely fertile; and they are remarkable for the completeness of their forest dress, which spreads over plain, valley, table-land, hill and mountain—even to the very top. Most of Sumatra belongs to the Dutch. The capital is called **Padang**,—a town which exports 10,000 tons of coffee every year.

**4. Java.**—The island of **Java** is a long narrow island, which stretches from east to west, a distance of about 575 miles. Like Sumatra, it is traversed in its greatest length by a chain of lofty mountains; and most of the

mountain-peaks in this chain are active volcanoes. The total number of volcanic peaks in Java is said to be forty-six ; and twenty of these are in a state of activity. There are, in fact, more active volcanoes in Java than in any other country of the same size in the world. The richness of the soil, the immense quantity of rain, and the equatorial heat, produce in this island the most luxuriant vegetation. Here are the highest and largest trees, the broadest leaves, and the largest flowers in the world,—excepting only the valley of the Amazon, which lies under almost the same climatic conditions. Indeed Java is the granary of the Eastern Archipelago ; and it is the most populous, as well as the most fertile island in all the tropical region of the globe. The villages, and even the towns, are hidden away among the luxuriant vegetation. The chief products are coffee, rice, and sugar. The Javanese are excellent agriculturists, and very careful and skilful workers in wood and iron. The labour of these industrious people is one of the chief sources of the great wealth of Holland. **Batavia** is the capital of Java, and also of all the Dutch Indian possessions. The whole island belongs to the Dutch.

**5. Sumatra.**—The island of **Sumatra** is about 1000 miles long ; and its area is larger than that of the British Isles. A mountain-chain and lofty table-land run throughout the length of the island ; and some of the peaks rise to the height of 11,000 feet. In this chain are several active volcanoes. On the eastern side of the island lies a great plain, as large as the whole of Ireland, and covered with dense forest. In most parts the soil is very fertile. Groves of palms, groups of bamboos, clumps of fruit-trees,—among which villages lie hid,—bright green rice-fields, and sugar plantations, meet the eye at every

turn. All tropical productions grow well in Sumatra ; but coffee, pepper, rice, sugar, and cocoa-nuts are the chief articles of export.

**6. The Philippines.**—The group of islands called the **Philippines** is the most compactly massed cluster of islands on the face of the globe. Most of the islands belong to Spain. More than four hundred are inhabited ;



An Indian Village, Manila.

and the largest—**Luzon**—is nearly as large as England ; while the second largest—**Mindanao**—is a little larger than Ireland. Moisture and heat combine to clothe these islands with the richest tropical vegetation. **Manilla** is the capital and the largest town, and it is also the largest city in the whole of Oceania. It has a population of more than 150,000, and its chief commercial suburb is built of bamboo.

7. **Borneo**.—The island of **Borneo** is the second largest island in the world. The equator runs through the middle of it. Its area is about three times as large as that of Great Britain. The interior is mountainous; the coast is low, flat, and swampy. The highest point yet known is **Mount Kini Balu**, or the “Chinese Widow”—a peak which rises to the height of 13,760 feet. Magnificent forests of beech, ironwood, the gutta-percha tree, and palms cover the island—which is, indeed, one vast forest. The chief product at present is pepper. The population consists chiefly of Malays and Dyaks. The greater part of the island belongs to the Dutch, but there is on the south coast a native kingdom called **Sarawak**, ruled over by an Englishman, Rajah Brooke, the nephew of Sir James Brooke—a great man, who spent his life and fortune in giving peace, plenty, and security to the Dyaks and Malays, and in curing them of their bloodthirsty habits.

8. **Celebes**.—The island of **Celebes** is the most oddly shaped in the world. It consists of four long peninsulas which run out from a centre, and no part is more than 70 miles from the sea. Through each peninsula runs a range of high mountains. **Macassar** is the chief town.

cor'al-line, made of coral.  
cease'less, endless.

de-struc'tive, causing much damage  
cli-mat'ic, belonging to climate.  
com-pact'ly, closely.

1. **Melanesia**, black-folk islands. (Gr. *melas*, black; *neoes*, an island.)
2. **Polynesia**, many islands. (Gr. *polus*, many.)
3. **Mikronesia**, small islands. (Gr. *mikros*, small.)

## THE PALM-TREE.

1. Is it the palm, the cocoa-palm,  
On the Indian Sea, by the isles of balm ?  
Or is it a ship in the breezeless calm ?—
2. A ship whose keel is of palm beneath,  
Whose ribs of palm have a palm-bark sheath,  
And a rudder of palm it steereth with.
3. Branches of palm are its spars and rails,  
Fibres of palm are its woven sails,  
And the rope is of palm that idly trails.—
4. What does the good ship bear so well ?—  
The cocoa-nut with its stony shell,  
And the milky sap of its inner cell.
5. The master reclines on a palm-mat soft,  
From a beaker of palm his drink is quaffed,  
And a palm-thatch shields from the sun aloft !
6. His dress is woven of palmy strands,  
And he holds a palm-leaf scroll in his hands,  
Traced with the Prophet's wise commands.
7. The turban folded about his head  
Was daintily wrought of the palm-leaf braid,  
And the fan that cools him of palm was made.
8. Of threads of palm was the carpet spun  
Whereon he kneels when the day is done,  
And the foreheads of Islam are bowed as one.

9. To him the palm is a gift divine,  
Wherein all uses of man combine,—  
House and raiment, and food and wine.
10. And in the hour of his great release,  
His need of the palm shall only cease  
With the shroud wherein he lieth in peace.

J. G. WHITTIER.

sheath, covering.  
rud'-der, helm.

beak'-er, a drinking-cup.  
quaffed, drunk.

com-bine', join together.

1. The **cocoa-palm** produces **cocoa-nuts**; and it is of the very greatest use to the inhabitants of the **East India Islands**.
2. **Balm**, a sweet-smelling plant.
3. **Milky sap**, the milk found inside the **cocoa-nut**.
4. **Prophet's**, **Mohammed's**.
5. **Turban**, a head-dress made of a piece of cloth folded round the head.
6. **Islam**, the faith of the **Mohammedan**.
7. **His need of the palm**, etc.—that is, to make his shroud.

## 60.—OCEANIA.—II.

1. **Melanesia**.—The different islands included under the generic name of **Melanesia** comprise the immense island of **New Guinea**, and various groups of islands in the Pacific, eastward as far as the **Fiji Islands**.

2. **New Guinea**.—The island of **Papua** or **New Guinea** is the largest island in the world. Its area is about 300,000 square miles; and hence it is ten times as large as **Scotland**, and more than three times as large as **Great Britain**. The animals and the vegetation of **New Guinea** are very like those of **Australia**. Indeed there is a very striking contrast between the animal life of



New Guinea and that of the larger islands—Borneo, Java, and Sumatra—which seem to belong to the same group. There is no rhinoceros, no elephant, no orang-outang in New Guinea. The pig is the only thick-skinned



Wooden House in New Guinea.

animal in the island. All the others are pouched animals, among which the tree-climbing kangaroo is the most remarkable. The plumage of the New Guinea birds surpasses that of the birds of all other countries in beauty, variety, and vividness of colour. The bird of paradise, parrots of every colour and size—including the largest and the smallest in the

world—kingfishers and pigeons in immense variety, and many others, are found in the greatest abundance. . . The coast is inhabited by a Malay race; the interior by pure Papuans. The Papuans are a dark race, with frizzly hair—"a cannibal negro race"—who live in very long

houses—each house a village ; and the main street or house is thickly decorated with human skulls.

**3. The Fiji Islands.**—Among the other islands which are classed under the name of Melanesia, the most important to us are the **Fiji Islands**. This is a group of more than 200 islands, and of these about eighty are inhabited. They were annexed to the British Empire in 1874. They are of volcanic origin, and the soil is exceedingly fertile. Bread-fruit, bananas, cocoa-nuts, sugarcane, and cotton grow in the greatest abundance ; and the chief exports are cotton and cocoa-nut oil. Many British merchants have settled on these islands—attracted by the fertile soil and the brilliant climate.



An Atoll.

**4. Mikronesia.**—The region of the “Small Islands,” or **Mikronesia**, includes a number of little islands north of the equator. These islands are of two classes—the mountainous and the low. The mountainous islands are always volcanic ; the low islands are the creation of the “coral insect.” The coral islands are built in the form of a circle of low reefs of coral rocks, which enclose a calm lagoon,

from which there are two or three openings into the main sea. Islands of this kind are called **atolls**. Most of the volcanic islands have a breakwater of coral rock round them; these breakwaters are termed **barrier-reefs**. **Guam**, in the Marianne Islands, is the largest island in Mikronesia.

**5. Polynesia.**—The region of **Polynesia** includes all the other islands in the Pacific, from the **Tonga** or **Friendly Islands**, in 20° S. lat., to the **Sandwich Islands**, in 20° N. lat. Here, again, the islands are divided into two classes—those of volcanic and those of coral origin. The most important groups are the **Society Islands** and the **Sandwich Islands**. The **Society Islands**, which belong to France, are lofty, volcanic, and fertile. The largest is **Tahiti**, which has a world-wide fame for the beauty of its mountain-forms, its picturesque valleys, and its wonderful cascades. **Papeete**, the capital, has a large trade in cocoa-nuts and mother-of-pearl. . . The **Sandwich Islands** are the great “house of call” for the splendid Pacific steamers which run between America, Asia, Australia, and New Zealand. **Hawaii**, the largest of the group, is the island on which Captain Cook, the famous navigator, lost his life in a skirmish with the natives. The whole island is one mass of lava. It contains several volcanoes, the largest of which are **Mauna Kea**, which towers to the height of 13,800 feet, and **Mauna Loa**, which is 13,650 feet high. On one of the flanks of Mauna Loa is the great crater of **Kilauea**, the floor of which is simply one vast lake of fire—a “glowing lake of lava, rising and falling for ever.” . . The capital of the group is **Honolulu**, on an island called **Oahu**; and its harbour can take in the largest steamers at all states of the tide.

*com-prise'*, include.

*im-mense'*, very large; that cannot  
be measured. (L. *in*, not; *mensuri*,

to measure.)

*a-bund'-ance*, plenty.

*dec'-or-at-ed*, ornamented.

1. *Navigator*, a person who sails in a ship. (L. *navis*, a ship.)

## CORAL ISLANDS.

1. Down in the tropic sea,  
Where the water is warm and deep,  
There are gardens fairer than any bee  
Ever saw in its honeyed sleep.
2. Flowers of crimson bright,  
And green and purple and blue,  
In the waters deep which the golden light  
Of the sun sinks softly through.
3. You have seen the bright red stem  
Of the wondrous coral tree;  
But its living flowers,—you saw not them—  
They died beneath the sea.
4. You have seen the coral white,  
The ghastly skeleton;  
But the living flowers were a fairer sight  
That used to grow thereon.
5. And over their delicate bones,  
The streams of the lower deep,  
Lay sand and shell and polished stones  
In many a little heap.

6. And this goes on and on,  
And the creatures bloom and grow,  
Till the mass of death they rest upon  
Comes upward from below.

7. And when the reef has grown  
Above the highest tide,  
It is a city of lifeless stone,  
Whose citizens have died.

8. Long ages pass,—those isles  
Have grown maturely fair;  
Green forests wave and summer smiles,  
And human homes are there.

P. G. HAMERTON.

del'i-cate, finely formed.

| ma-ture'ly, ripely. (*L. maturus*, ripe.)

1. Flowers of crimson, etc. They are not flowers, but small and beautifully coloured sea-animals.

2. Skeleton. The hard bony substance which we call coral is really made up of the skeletons of the little coral animals. Under the water it is covered over with living and working creatures.

3. Comes upward, that is, by the movement of the land on which it rests.





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